



Video Security  
Professional Solutions for More Security

# Product Catalogue 2009/2010

SECURITY • APPLICATIONS • NETWORK • TECHNOLOGY





# WELCOME TO SANTEC



For more than 20 years, SANTEC has been one of the leading brands for products, systems and solutions for video surveillance technology.

SANTEC provides the full range of CCTV cameras, digital video recorders, system components, network cameras, network servers and software as well as equipment and accessories for different applications and requirements.

Product management and quality control of SANTEC products take place in Germany. We are ISO 9001-2000 certified and normally deliver within 24 hours.

Product quality and reliability of the complete systems are most important to us. When purchasing SANTEC products, you are sure to always receive innovative and proven systems.

SANTEC products are available through a network of authorised partners across Europe.

Long-time experience and high-quality technology products assure highest security for your business.

For more information, please visit our website at:

**[www.santec-video.com](http://www.santec-video.com)**





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## SANTEC box cameras



The new SANTEC day/night cameras of the 8000-series offer a number of features, all combined in one camera. These enhancements result in improved handling, improved picture quality at day and night and more flexible application options. The cameras have a resolution of up to 700 TVL. Cameras VTC-8100P, VTC-8112P, VTC-8200P and VTC-8212P operate at a minimum illumination of only 0.05 lux in colour and 0.0002 lux in black/white. The cameras are characterised by digital zoom, digital image stabilisation, picture-flip of 180° as well as digital noise reduction and automatic day/night switching. All cameras of the 8000-series are therefore ideal cameras for applications of 24 hours a day, even under difficult conditions.

### Technical specifications

- day/night colour camera
- mechanical IR cut filter
- high sensitivity
- digital image stabilisation
- S/N ratio > 52 dB
- BLC - HLC backlight compensation
- digital noise reduction (DNR)
- multi-language OSD
- motion detection (8 zones)
- privacy zones (8 zones)
- output contacts (n.o. / n.c.)
- BNC video output 1 Vpp

### Special features

- resolution up to 700 TVL (b/w) and 580 TVL (colour)
- multi-language OSD (on-screen-display) menu
- 3 G-sensor for sabotage protection / positioning protection
- digital image stabilisation (DIS)
- highlight compensation (HLC)
- wide dynamic range (WDR), 52 dB (x128)
- picture-flip of 180°



## SANTEC box cameras: Special features

### G-sensor



#### Sabotage protection / positioning protection

The 3 G-sensor protects the camera against sabotage and unwanted position changes.

#### On-screen-display (OSD):

#### 3 G-sensor:

#### Digital noise reduction (DNR):

#### Digital image stabiliser (DIS):

#### Wide dynamic range (WDR):

#### Picture-flip of 180°:

### Digital noise reduction (DNR)



#### Notification in video picture

A sabotage event triggers a notification which is displayed in the video picture.



#### without DNR

DNR improves the picture quality at night.



#### with activated DNR

### 480/580 TVL cameras by comparison



#### 480 TVL

#### 580 TVL

Enhanced security and more visible details thanks to sharper picture display with 580 TVL cameras.

Camera adjustments are being made via a menu which is displayed in the video picture. It enables easy access to different camera adjustments. The OSD is multi-language.

The 3 G-sensor protects the cameras against sabotage. Whenever the camera is moved after it has been installed, a notification and an alarm is being triggered.

DNR improves the S/N ratio and leads to enhanced picture quality. At the same time, the required disk space of a connected recording system is reduced by up to 40%.

The built-in image stabiliser reduces blurred pictures caused by camera shakes or vibrations, e.g. on bridges. This also reduces the required disk space of the recording system (for MPEG) because less data is being produced.

The dynamic range of a picture is increased. Thus details in dark as well as in bright picture areas are emphasised. Using the OSD menu, the picture can be flipped digitally by 180°.

**SANTEC box cameras**

**NEW!**



**NEW!**



**NEW!**



**VTC-8100P, VTC-8112P**

- day/night colour camera
- mechanical IR cut filter
- high sensitivity
- digital image stabilisation
- S/N ratio > 52 dB
- BLC - HLC backlight compensation
- digital noise reduction (DNR)
- multi-language OSD
- motion detection (8 zones)
- privacy zones (8 zones)
- output contacts (n.o. / n.c.)
- BNC video output 1 Vpp
- BGV-Kassen certified

**VTC-8200P, VTC-8212P**

- day/night colour camera
- mechanical IR cut filter
- high sensitivity
- digital image stabilisation
- S/N ratio > 52 dB
- BLC - HLC backlight compensation
- digital noise reduction (DNR)
- 3 G-sensor against sabotage / positioning protection
- multi-language OSD
- motion detection (8 zones)
- privacy zones (8 zones)
- output contacts (n.o. / n.c.)
- BNC video output 1 Vpp
- **UTP (Unshielded Twisted Pair) video output**
- RS-485 communication to parameterise the camera (Pelco D protocol)

**VTC-8300WDP, VTC-8312WDP**




- day/night WDR colour camera
- mechanical IR cut filter
- high sensitivity
- digital image stabilisation
- S/N ratio > 52 dB
- BLC - HLC backlight compensation
- wide dynamic range 52 dB (x128)
- digital noise reduction (DNR)
- 3 G-sensor against sabotage / positioning protection
- multi-language OSD
- motion detection (8 zones)
- privacy zones (8 zones)
- output contacts (n.o. / n.c.)
- BNC video output 1 Vpp
- **UTP (Unshielded Twisted Pair) video output**
- RS-485 communication to parameterise the camera (Pelco D protocol)

**Product overview: SANTEC box cameras**

| Part no.    | Type      | CCD format | TVL colour/bw | Lens control | Lux colour/bw | OSD | 3 G-sensor | Communi-cation | Voltage       | Dimensions (WxHxD) mm | Weight |
|-------------|-----------|------------|---------------|--------------|---------------|-----|------------|----------------|---------------|-----------------------|--------|
| VTC-8100P   | day/night | 1/3"       | 580/700       | DC           | 0.05/0.0002   | yes | --         | --             | 90-240V AC    | 62 x 65 x 130         | 600 g  |
| VTC-8112P   | day/night | 1/3"       | 580/700       | DC           | 0.05/0.0002   | yes | --         | --             | 12V DC/24V AC | 62 x 65 x 130         | 500 g  |
| VTC-8200P   | day/night | 1/3"       | 580/700       | DC           | 0.05/0.0002   | yes | yes        | RS-485/UTP     | 90-240V AC    | 62 x 65 x 130         | 600 g  |
| VTC-8212P   | day/night | 1/3"       | 580/700       | DC           | 0.05/0.0002   | yes | yes        | RS-485/UTP     | 12V DC/24V AC | 62 x 65 x 130         | 500 g  |
| VTC-8300WDP | WDR       | 1/3"       | 560/700       | DC           | 0.3/0.01      | yes | yes        | RS-485/UTP     | 90-240V AC    | 62 x 65 x 130         | 600 g  |
| VTC-8312WDP | WDR       | 1/3"       | 560/700       | DC           | 0.3/0.01      | yes | yes        | RS-485/UTP     | 12V DC/24V AC | 62 x 65 x 130         | 500 g  |
| DUM-8100    | dummy     | --         | --            | --           | --            | --  | --         | --             | --            | 62 x 65 x 130         | 350 g  |

- !**
1. The lenses shown in the above photos are not included in the delivery.
  2. Recommended power supply unit for 12 V cameras: VCA-12V-1.3A
  3. All cameras listed above have a C/CS lens mount.

**Lenses for SANTEC box cameras**

| Part no.  | Description   |
|-----------|---|
| 14131DN/B | <p>SANTEC 1/3" 2.8 - 12.0 mm lens for VTC-8100P, VTC-8112P, VTC-8200P, VTC-8212P, VTC-8300WDP and VTC-8312WDP</p> <ul style="list-style-type: none"> <li>• CCD format: 1/3"</li> <li>• mount: CS</li> <li>• focal length: 2.8 - 12.0 mm</li> <li>• F-stop: F1.2</li> <li>• aperture control: DC</li> <li>• day/night: yes</li> <li>• aspherical</li> <li>• angle of view (horizontal): 84° - 24°</li> <li>• dimensions (WxHxD): 48 x 35 x 60 mm</li> <li>• weight: 58 g</li> </ul>   |
| 14141DN/B | <p>SANTEC 1/3" 3.0 - 8.5 mm lens for VTC-8100P, VTC-8112P, VTC-8200P, VTC-8212P, VTC-8300WDP and VTC-8312WDP</p> <ul style="list-style-type: none"> <li>• CCD format: 1/3"</li> <li>• mount: CS</li> <li>• focal length: 3.0 - 8.5 mm</li> <li>• F-stop: F1.0</li> <li>• aperture control: DC</li> <li>• day/night: yes</li> <li>• aspherical</li> <li>• angle of view (horizontal): 78° - 32°</li> <li>• dimensions (WxHxD): 35 x 50 x 50 mm</li> <li>• weight: 60 g</li> </ul>     |
| 14161DN   | <p>SANTEC 1/3" 7.5 - 50.0 mm lens for VTC-8100P, VTC-8112P, VTC-8200P, VTC-8212P, VTC-8300WDP and VTC-8312WDP</p> <ul style="list-style-type: none"> <li>• CCD format: 1/3"</li> <li>• mount: CS</li> <li>• focal length: 7.5 - 50.0 mm</li> <li>• F-stop: F1.0</li> <li>• aperture control: DC</li> <li>• day/night: yes</li> <li>• aspherical</li> <li>• angle of view (horizontal): 36° - 5°</li> <li>• dimensions (WxHxD): 38.8 x 50 x 65 mm</li> <li>• weight: 62 g</li> </ul>  |



## Camera sets

As a service to our partners, we provide ready assembled sets which have individually been put together in our service centre. The camera sets consist of proven and matching components and thus provide a time and cost-saving solution during the installation phase.

### Infrared camera sets (850 nm)



#### HEL-IR65D, HEL-IR75D

The infrared camera sets consist of the proven **HEL-IR housings with integrated IR-LED illuminators with up to 170 m range**. We offer a choice of various matching colour day/night cameras which are aligned with the IR illuminators. The sets come with a **DC lens with 7.5 - 50 mm focal length**. Moreover, the sets are delivered with a **2 m cable** made of UV-proof and halogen-free material which is particularly suitable for outdoor applications.

| Housing/camera                     | VTC-8100P             | VTC-8200P             | VTC-8300WDP             |
|------------------------------------|-----------------------|-----------------------|-------------------------|
| <b>HEL-IR65D</b><br>(range: 70 m)  | <b>IR65-SET-8100P</b> | <b>IR65-SET-8200P</b> | <b>IR65-SET-8300WDP</b> |
| <b>HEL-IR75D</b><br>(range: 170 m) | <b>IR75-SET-8100P</b> | <b>IR75-SET-8200P</b> | <b>IR75-SET-8300WDP</b> |

**! KS-EXT-1** Extension of the camera cable. Price per metre. Please indicate the required cable length when you place your order. You will find technical data on the cameras and housings in the respective product chapters.

### Camera sets for outdoor applications - series "A"



#### HEL-30K, HEL-62D

The "A"-series camera sets consist of the proven **weather-proof housings of the HEL-series**. We offer a choice of various matching high quality **day/night cameras** which are aligned with the housings. The sets come with a **wide-angle lens with 2.8 - 12 mm focal length**. Moreover, the sets are delivered with a **2 m cable** made of UV-proof and halogen-free material which is particularly suitable for outdoor applications. The sets with **housings HEL-30K come with wall bracket WBJ-26**.

| Housing / camera | VTC-8100P            | VTC-8200P            | VTC-8300WDP            |
|------------------|----------------------|----------------------|------------------------|
| <b>HEL-30K</b>   | <b>VTC-8100P-A</b>   | <b>VTC-8200P-A</b>   | <b>VTC-8300WDP-A</b>   |
| <b>HEL-62D</b>   | <b>VTC-8100P-A62</b> | <b>VTC-8200P-A62</b> | <b>VTC-8300WDP-A62</b> |

**! KS-EXT-1** Extension of the camera cable. Price per metre. Please indicate the required cable length when you place your order. You will find technical data on the cameras and housings in the respective product chapters.



## Camera sets for outdoor applications - series "AZ"

NEW!



HEL-30K

NEW!



HEL-62D

### HEL-30K, HEL-62D

The "AZ"-series camera sets consist of the proven **weather-proof housings of the HEL-series**. We offer a choice of various matching high quality **day/night cameras** which are aligned with the housings. The sets come with a **DC vario zoom lens with 7.5 - 50 mm focal length**. Moreover, the sets are delivered with a **2 m cable** made of UV-proof and halogen-free material which is particularly suitable for outdoor applications. The sets with housings **HEL-30K come with wall bracket WBJ-26**.

| Housing / camera | VTC-8100P      | VTC-8200P      | VTC-8300WDP      |
|------------------|----------------|----------------|------------------|
| HEL-30K          | VTC-8100P-AZ   | VTC-8200P-AZ   | VTC-8300WDP-AZ   |
| HEL-62D          | VTC-8100P-AZ62 | VTC-8200P-AZ62 | VTC-8300WDP-AZ62 |



#### KS-EXT-1

Extension of the camera cable. Price per metre. Please indicate the required cable length when you place your order. You will find technical data on the cameras and housings in the respective product chapters.

## Motor zoom cameras



### VTC-642DNP

- day/night motor zoom camera
- zoom: 22x optical, 11x digital
- resolution 480 TVL (colour), 530 TVL (black/white)
- wide dynamic range (WDR) function
- mechanical IR cut filter
- automatic gain control (AGC)
- integrated picture-in-picture (PIP) function
- S/N ratio > 52 dB
- Pelco D protocol
- controlling via keyboard KSC-2406
- BGV-Kassen certified

### VTC-682DNP

- day/night motor zoom camera
- weather-proof housing IP66
- zoom: 22x optical, 11x digital
- resolution 480 TVL (colour), 530 TVL (black/white)
- wide dynamic range (WDR) function
- mechanical IR cut filter
- automatic gain control (AGC)
- integrated picture-in-picture (PIP) function
- S/N ratio > 52 dB
- Pelco P protocol
- controlling via keyboard KSC-2406
- BGV-Kassen certified

### Product overview: Motor zoom cameras

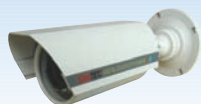
| Part no.   | CCD format | TVL colour/bw | Focal length (mm) | Zoom optical/digital | Lux colour/bw | BLC | OSD | Communication | Voltage | Dimensions (WxHxD) mm |
|------------|------------|---------------|-------------------|----------------------|---------------|-----|-----|---------------|---------|-----------------------|
| VTC-642DNP | 1/4"       | 480/530       | 3.8 - 85.8        | 22/11                | 0.5/0.001     | yes | yes | RS-232/RS-485 | 12V DC  | 62x70x120             |
| VTC-682DNP | 1/4"       | 480/530       | 3.8 - 85.8        | 22/11                | 0.5/0.001     | yes | yes | RS-232/RS-485 | 12V DC  | 120x84x218 (*)        |



(\*) dimensions without bracket

For all motor zoom cameras it is recommended to use the following power supply unit: VCA-12V-1.3A

## SANTEC compact cameras with built-in lens



NEW!



NEW!



### VTC-249IRP/W

- day/night colour camera
- mechanical IR cut filter
- high picture resolution 540 TVL
- integrated vario zoom 4.0 - 9.0 mm
- S/N ratio > 52 dB
- OSD
- BLC backlight compensation
- integrated IR-LEDs; range: up to 20 m
- split glass technology
- wall bracket with integrated cable management
- voltage: 12 V DC / 3.5 watt
- operating temperature: -10° to +50° C

### VTC-279IRP/W, VTC-282IRP/W

- day/night colour camera
- mechanical IR cut filter
- high picture resolution 580/700 TVL
- integrated vario zoom 2.8-12 mm and 9-22 mm resp.
- S/N ratio > 52 dB
- multi-language OSD
- BLC - HLC backlight compensation
- digital noise reduction (DNR)
- digital image stabilisation
- motion detection (8 zones)
- privacy zones (8 zones)
- integrated IR-LEDs; range: up to 40 m
- split glass technology
- all adjustments can be made without opening the camera
- wall bracket with integrated cable management
- voltage: 12 V DC / 24 V AC / 6 watt
- operating temperature: -10° to +50° C

### VTC-289IRP/W

- day/night colour camera
- mechanical IR cut filter
- high picture resolution 580/700 TVL
- integrated vario zoom 5 - 50 mm
- S/N ratio > 52 dB
- multi-language OSD
- BLC - HLC backlight compensation
- digital noise reduction (DNR)
- digital image stabilisation
- motion detection (8 zones)
- privacy zones (8 zones)
- integrated IR-LEDs; range: up to 40 m
- split glass technology
- all adjustments can be made without opening the camera
- wall bracket with integrated cable management
- voltage: 12 V DC / 24 V AC, 6 watt
- operating temperature: -10° to +50° C

### Product overview: SANTEC compact cameras with built-in lens

| Part no.     | Type      | CCD format | TVL colour/bw | Focal length (mm) | Lux colour/bw (IR) | BLC | IR LEDs | Classification | Voltage       | Dimensions (WxHxD) mm | Weight |
|--------------|-----------|------------|---------------|-------------------|--------------------|-----|---------|----------------|---------------|-----------------------|--------|
| VTC-249IRP/W | day/night | 1/3"       | 540/540       | 4.0 - 9.0         | 0.1/0.0            | yes | yes     | IP-66          | 12V DC        | 59x59x190             | 450 g  |
| VTC-279IRP/W | day/night | 1/3"       | 580/700       | 2.8 - 12.0        | 0.05/0.0           | yes | yes     | IP-66          | 12V DC/24V AC | 82x78x256             | 1050 g |
| VTC-282IRP/W | day/night | 1/3"       | 580/700       | 9.0 - 22.0        | 0.05/0.0           | yes | yes     | IP-66          | 12V DC/24V AC | 82x78x256             | 1050 g |
| VTC-289IRP/W | day/night | 1/3"       | 580/700       | 5.0 - 50.0        | 0.05/0.0           | yes | yes     | IP-66          | 12V DC/24V AC | 101x97x286            | 1650 g |

1. Accessories for the above mentioned cameras: installation box JB-100/W and corner/pole bracket CMP-200/W (see page 12). For these cameras the following power supply unit is recommended: VCA-12V-1.3AS
2. The range of the built-in IR-LEDs strongly depend on the location and the surroundings. Strongly absorbent surfaces, e.g. dark, rough structures (floor, lawn or asphalt), may lead to a considerable reduction of the maximum range.

## Specific characteristics of SANTEC CCTV cameras

### Cable management



#### integrated in bracket

The cables are thus protected against manipulation.

### Outside adjustments



#### adjustments

The lens and the OSD are adjustable from outside; no need to open the camera.

### Split glass technology (SGT)



#### with built-in IR-LEDs

Split glass technology separates lens and IR-LEDs.

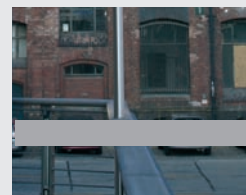
### Video test connector



#### BNC connection

Video test connector for installation and services purposes.

### Privacy zones



#### privacy protection

The privacy zones can be customised.

### Digital noise reduction (DNR):

DNR improves the signal/noise ratio and leads to enhanced picture quality. At the same time, DNR reduces the required disk capacity of a connected recording system by up to 40%.

### Split glass technology (SGT):

Split glass technology makes it possible to separate the IR-LEDs from the lens so that reflections in the front glass don't occur.

### Video test connector:

It's an additional video output placed inside the housing which simplifies the camera adjustment during the installation phase.

### On-screen-display (OSD):

Camera adjustments are being made via a menu which is displayed in the video picture. A mini-joystick helps you to navigate through the menu. Hence ideal camera adjustments are possible.

### Privacy zones:

By masking certain areas of the picture, it is possible to create privacy zones which will not be displayed or recorded. The positions and areas of these masks can freely be programmed. Hence privacy can effectively be protected against violations.

### Cable management:

The cables run inside the camera and are thus protected against outside manipulation.

**SANTEC dome cameras**

**NEW!**



**NEW!**



**VTC-262P/W**

- colour dome camera
- electronic day/night switching
- high resolution 580/700 TVL
- integrated vario zoom lens 2.8 - 12 mm
- S/N ratio > 52 dB
- multi-language OSD
- BLC - HLC backlight compensation
- digital noise reduction (DNR)
- digital image stabilisation
- motion detection (8 zones)
- privacy zones (8 zones)
- 3-axis adjustment of the camera module
- video test connector
- BGV-Kassen certified

**VTC-272WDP/W**

- colour dome camera with wide dynamic range (WDR) function
- electronic day/night switching
- high resolution 560/700 TVL
- integrated vario zoom lens 2.8 - 12 mm
- S/N ratio > 52 dB
- wide dynamic range 52 dB (x128)
- multi-language OSD
- BLC - HLC backlight compensation
- digital noise reduction (DNR)
- digital image stabilisation
- motion detection (8 zones)
- privacy zones (8 zones)
- 3-axis adjustment of the camera module
- video test connector

Accessories for the above mentioned cameras: white inside cover COV-IN6272W (see page 12)

**Product overview: SANTEC dome cameras**

| Part no.     | Type   | CCD format | TVL colour/bw | Focal length (mm) | Lux colour/bw | BLC | AGC | Voltage       | Dimensions (DxH) mm | Weight |
|--------------|--------|------------|---------------|-------------------|---------------|-----|-----|---------------|---------------------|--------|
| VTC-262P/W   | colour | 1/3"       | 580           | 2.8 - 12.0        | 0.05/0.0002   | yes | yes | 12V DC/24V AC | 140x96              | 350 g  |
| VTC-272WDP/W | WDR    | 1/3"       | 560           | 2.8 - 12.0        | 0.3/0.01      | yes | yes | 12V DC/24V AC | 140x96              | 350 g  |
| VTC-262-DUM  | dummy  | --         | --            | --                | --            | --  | --  | --            | 140x96              | 350 g  |

**Highlight compensation (HLC)**



without HLC



with HLC

Areas in the picture which are too bright are reversed so that important details become visible.

**Clear bubble**



with white inside cover

The colours of cameras VTC-262P/W and VTC-272WDP/W can be adapted by adding an additional inside cover (COV-IN6272W) (has to be ordered separately).

**Wide dynamic range (WDR)**



without WDR



with WDR

Extreme differences in brightness can be made visible using WDR (only for VTC-272WDP/W).

**Digital image stabiliser (DIS):**

The built-in image stabiliser reduces blurred pictures caused by camera shakes or vibrations, e.g. on bridges. This also reduces the required disk space of the recording system (for MPEG) because less data is being produced.

**Highlight compensation (HLC):**

This technology ensures that bright light is reversed in the picture, e.g. caused by spotlights. Due to the fact that blinding light has been reduced, even details can be identified, e.g. a car's licence plate located between two headlights.

**Wide dynamic range (WDR):**

The dynamic range of a picture is increased. Thus details in dark as well as in bright picture areas are emphasised; 52 dB (x128).

**Privacy zones:**

By masking certain areas of the picture, it is possible to create privacy zones which will not be displayed or recorded. The positions and areas of these masks can freely be programmed. Hence privacy can effectively be protected against violations.

## Vandal-proof dome cameras



| VTC-HDH210FSP   | VTC-HDH322P, VTC-HDH352P   | VTC-HDH359IRP/W, -HDH359IRP/G  | VTC-HDH422P/W, -432IRP/W, -442WDP/W   |
|---|--|--|---|
| <ul style="list-style-type: none"> <li>vandal-proof mini dome camera</li> <li>high resolution 540 TVL</li> <li>integrated 3.0 mm lens</li> <li>digital noise reduction (DNR)</li> <li>easy installation: surface or ceiling mounting (wall/ceiling installation)</li> <li>compact design</li> </ul> | <ul style="list-style-type: none"> <li>vandal-proof day/night dome camera</li> <li>mechanical IR cut filter</li> <li>high resolution 580/700 TVL</li> <li>VTC-HDH322P: 2.8 - 12 mm lens</li> <li>VTC-HDH352P: 2.8 - 10 mm Easy Focus lens</li> <li>S/N ratio &gt; 52 dB</li> <li>multi-language OSD</li> <li>BLC - HLC backlight compensation</li> <li>digital noise reduction (DNR)</li> <li>digital image stabilisation</li> <li>motion detection (8 zones)</li> <li>privacy zones (8 zones)</li> <li>integrated electronic water level for installation (only VTC-HDH352P)</li> <li>3-axis adjustment of the camera module</li> <li>wall and ceiling mounting possible</li> <li>vandal-proof and weather-proof housing IP-66</li> <li>optional dome cover; see page 12</li> </ul> | <ul style="list-style-type: none"> <li>vandal-proof day/night dome camera</li> <li>high resolution 580 TVL</li> <li>integrated vario zoom lens 2.8-12 mm</li> <li>electronic day/night switching</li> <li>all adjustments can be made without opening the camera</li> <li>split glass technology</li> <li>easy installation: surface or ceiling mounting</li> <li>compact design</li> <li><b>VTC-HDH359IRP/G has an anthracite-coloured housing</b></li> </ul> | <ul style="list-style-type: none"> <li>vandal-proof day/night dome camera</li> <li>mechanical IR cut filter</li> <li>WDR function (only for VTC-HDH442WDP/W)</li> <li>wide dynamic range 52 dB (x128)</li> <li>high resolution 580/700 TVL</li> <li>integrated vario zoom lens 2.8-12 mm</li> <li>S/N ratio &gt; 52 dB</li> <li>multi-language OSD</li> <li>BLC - HLC backlight compensation</li> <li>digital noise reduction (DNR)</li> <li>digital image stabilisation</li> <li>motion detection (8 zones)</li> <li>privacy zones (8 zones)</li> <li>3-axis adjustment of the camera module</li> <li>wall and ceiling mounting possible</li> <li>vandal-proof and weather-proof housing IP-66</li> <li>integrated IR-LED; range: 20 m (only for VTC-HDH432IRP/W)</li> <li>BGV-Kassen certified</li> <li>accessories: wall bracket WB-HDH42/W (see page 12)</li> </ul> |

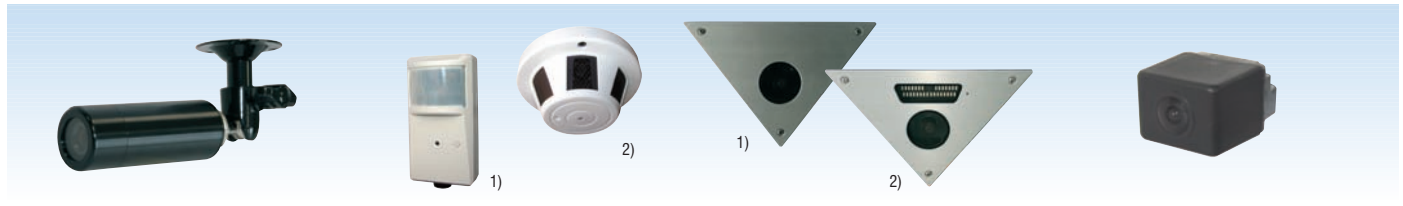
### Product overview: Vandal-proof dome cameras

| Part no.        | Type      | CCD format | TVL colour/bw | Focal length (mm) | Lux colour/bw | Classification | Voltage           | Dimensions (DxH) mm | Weight |
|-----------------|-----------|------------|---------------|-------------------|---------------|----------------|-------------------|---------------------|--------|
| VTC-HDH210FSP   | day/night | 1/3"       | 540/540       | 3.0               | 0.1/0.1       | IP-66          | 12 V DC           | 83x66               | 280 g  |
| VTC-HDH322P     | day/night | 1/3"       | 580/700       | 2.8-12.0          | 0.05/0.0002   | IP-66          | 12 V DC           | 110x80              | 200 g  |
| VTC-HDH352P     | day/night | 1/3"       | 580/700       | 2.8-10.0          | 0.05/0.0002   | IP-66          | 12 V DC / 24 V AC | 130x88              | 1050 g |
| VTC-HDH359IRP/W | day/night | 1/3"       | 580/580       | 2.8-12            | 0.3/0.0       | IP-66          | 12 V DC           | 120x96              | 600 g  |
| VTC-HDH359IRP/G | day/night | 1/3"       | 580/580       | 2.8-12.0          | 0.3/0.0       | IP-66          | 12 V DC           | 120x96              | 600 g  |
| VTC-HDH422P/W   | day/night | 1/3"       | 580/700       | 2.8-12.0          | 0.05/0.0002   | IP-66          | 12 V DC / 24 V AC | 144x120             | 1050 g |
| VTC-HDH432IRP/W | day/night | 1/3"       | 580/700       | 2.8-12.0          | 0.05/0.0      | IP-66          | 12 V DC / 24 V AC | 144x120             | 1050 g |
| VTC-HDH442WDP/W | day/night | 1/3"       | 560/700       | 2.8-12.0          | 0.3/0.01      | IP-66          | 12 V DC / 24 V AC | 144x120             | 1050 g |

**!** Recommended power supply unit for dome cameras: VCA-12V-0.6A. Recommended power supply unit for vandal-proof cameras: VCA-12V-1.3A  
 The range of the built-in IR-LEDs strongly depends on the location and the surroundings.  
 Strongly absorbent surfaces, e.g. dark, rough structures (floor, lawn or asphalt), may lead to a considerable reduction of the maximum range.

|  |   |   |  |
|--|---|---|--|
| <p><b>Electronic water level</b></p> <p><b>for adjustments</b></p> <p>Two LEDs help to adjust and install the camera.</p>  | <p><b>Easy Focus</b></p> <p><b>zoom via mini-joystick</b></p> <p>It is not necessary to adjust the sharpness because the lens has a high focus range.</p> | <p><b>White dome cover</b></p> <p><b>with cover (CABD)</b></p> <p>Cameras VTC-HDH322P and VTC-HDH352P can be adapted in colour by adding the optional white dome cover.</p>   | <p><b>Installation with wall bracket and corner mounting</b></p> <p><b>mounting with WB-HDH42/W</b>      <b>mounting with WB-HDH359/W and CMP-200/W</b></p> <p>The vandal-proof SANTEC dome cameras can be mounted with wall brackets. Suitable wall brackets can be found on page 12.</p> |
| <p><b>Backlight compensation (BLC):</b> Usually, a camera monitors an indoor room which is lit from behind, e.g. a glass front door or a window. If BLC is activated, the camera adjusts automatically to reach the best picture quality by evening out dark and light areas in the picture. Picture elements which are quite dark in the foreground thus become brighter.</p> |   | <p><b>Highlight compensation (HLC):</b> This technology ensures that bright light is reversed in the picture, e.g. caused by spotlights. Due to the fact that blinding light has been reduced, even details can be identified, e.g. a car's licence plate located between two headlights.</p> |  |
| <p><b>Electronic water level:</b> At the installation phase, a G-sensor serves as an electronic adjustment tool (VTC-HDH352P). The horizontal level will be shown by blinking LEDs.</p>  |   |   |  |

## Mini and discrete cameras



| VTC-258P/B  | VTC-512C <sup>1)</sup> , VTC-2612C <sup>2)</sup>   | VTC-E100P <sup>1)</sup> , VTC-E220IRP <sup>2)</sup>  | VRV-110P, VRV-120MP  |
|---|--|--|--|
| <ul style="list-style-type: none"> <li>• mini colour camera</li> <li>• resolution 540 TVL</li> <li>• integrated 3.6 mm lens</li> <li>• S/N ratio &gt; 48 dB</li> <li>• automatic backlight compensation (BLC)</li> <li>• automatic gain control (AGC)</li> <li>• internal synchronisation</li> <li>• metal housing</li> <li>• delivery includes power supply unit and wall bracket</li> </ul> | <p><b>VTC-512C</b></p> <ul style="list-style-type: none"> <li>• camera in motion detection housing</li> <li>• resolution 480 TVL</li> <li>• integrated 3.7 mm lens</li> <li>• built-in IR motion detector</li> <li>• alarm output</li> <li>• delivery includes power supply unit</li> </ul> <p><b>VTC-2612C</b></p> <ul style="list-style-type: none"> <li>• camera in smoke detection housing</li> <li>• delivery includes power supply unit</li> </ul> | <ul style="list-style-type: none"> <li>• camera for corner mounting (e.g. in elevators or staircases)</li> <li>• resolution 480 TVL</li> <li>• integrated 2.3 mm lens</li> <li>• S/N ratio &gt; 48 dB</li> <li>• automatic gain control (AGC)</li> <li>• internal synchronisation</li> <li>• shock-resistant housing</li> <li>• VTC-E220IRP has built-in IR-LEDs with up to 7 m range</li> </ul> | <ul style="list-style-type: none"> <li>• mini industrial camera (e.g. for rear view systems, machines, cash dispensers)</li> <li>• resolution 330 TVL</li> <li>• integrated 1.9 mm lens</li> <li>• angle of view 140°</li> <li>• automatic gain control (AGC)</li> <li>• weather-proof housing IP-68, e-certified for mobile applications</li> <li>• VRV-120MP: picture is mirrored</li> </ul> |

| Product overview: Mini and discrete cameras |        |            |     |                   |     |         |                       |        |  |
|---|--------|------------|-----|-------------------|-----|---------|-----------------------|--------|--|
| Part no.                                    | Type   | CCD format | TVL | Focal length (mm) | Lux | Voltage | Dimensions (WxHxD) mm | Weight |  |
| VTC-258P/B                                  | colour | 1/4"       | 540 | 3.6               | 0.1 | 12 V DC | 26x67                 | 110 g  |  |
| VTC-512C                                    | colour | 1/4"       | 480 | 3.6               | 2.0 | 12 V DC | 70x120x48             | 140 g  |  |
| VTC-2612C                                   | colour | 1/4"       | 480 | 3.6               | 0.5 | 12 V DC | 130x58                | 130 g  |  |
| VRV-110P                                    | colour | 1/4"       | 330 | 1.9               | 2.0 | 12 V DC | 33x25x41              | 62 g   |  |
| VRV-120MP                                   | colour | 1/4"       | 330 | 1.9               | 2.0 | 12 V DC | 33x25x41              | 62 g   |  |
| VTC-E100P                                   | colour | 1/4"       | 480 | 2.3               | 0.5 | 12 V DC | 210x140x45            | 430 g  |  |
| VTC-E220IRP                                 | colour | 1/4"       | 480 | 2.3               | 0.5 | 12 V DC | 210x140x45            | 430 g  |  |

! For cameras VRV-110P, VRV-120MP, VTC-E100P, VTC-E220IRP and VTC-2612C it is recommended to use power supply unit VCA-12V-0.6AS.

## Board cameras



| VCK-842NP   | VCK-850P/W   | VCK-860DN/W   | VCK-870WDP/W   |
|---|--|---|--|
| <ul style="list-style-type: none"> <li>• high sensitivity</li> <li>• electronic lens controlling</li> <li>• pinhole lens</li> <li>• ideal for installations in housings, machines, auto-mats, etc.</li> </ul> | <ul style="list-style-type: none"> <li>• high sensitivity</li> <li>• digital image stabilisation</li> <li>• S/N ratio &gt; 52 dB</li> <li>• BLC - HLC backlight compensation</li> <li>• electronic day/night switching</li> <li>• multi-language OSD</li> <li>• motion detection (8 zones)</li> <li>• privacy zones (8 zones)</li> <li>• BNC video output 1 Vpp</li> </ul> | <ul style="list-style-type: none"> <li>• high sensitivity</li> <li>• digital image stabilisation</li> <li>• S/N ratio &gt; 52 dB</li> <li>• BLC - HLC backlight compensation</li> <li>• electronic day/night switching with IR cut filter</li> <li>• integrated DC lens 2.8-12 mm</li> <li>• multi-language OSD</li> <li>• motion detection (8 zones)</li> <li>• privacy zones (8 zones)</li> <li>• BNC video output 1 Vpp</li> </ul> | <ul style="list-style-type: none"> <li>• high sensitivity</li> <li>• digital image stabilisation</li> <li>• S/N ratio &gt; 52 dB</li> <li>• BLC - HLC backlight compensation</li> <li>• WDR function</li> <li>• electronic day/night switching with IR cut filter</li> <li>• Easy Focus lens 2.8-12 mm</li> <li>• multi-language OSD</li> <li>• motion detection (8 zones)</li> <li>• privacy zones (8 zones)</li> <li>• BNC video output 1 Vpp</li> </ul> |

| Product overview: Board cameras |               |            |               |                   |              |               |     |         |                       |        |
|---------------------------------|---------------|------------|---------------|-------------------|--------------|---------------|-----|---------|-----------------------|--------|
| Part no.                        | Type          | CCD format | TVL colour/bw | Focal length (mm) | Lens control | Lux colour/bw | OSD | Voltage | Dimensions (WxHxD) mm | Weight |
| VCK-842NP                       | colour        | 1/3"       | 480           | 3.7               | electrical   | 0.1           | no  | 12 V DC | 42x42x34              | 40 g   |
| VCK-850P/W                      | colour        | 1/3"       | 580           | optional lens     | manual       | 0.05/0.0002   | yes | 12 V DC | 42x42                 | 40 g   |
| VCK-860DN/W                     | day/night     | 1/3"       | 580/700       | 2.8-12            | DC           | 0.05/0.0002   | yes | 12 V DC | 42x42                 | 70 g   |
| VCK-870WDP/W                    | day/night,WDR | 1/3"       | 560/700       | 2.8-10            | DC           | 0.3/0.01      | yes | 12 V DC | 42x42                 | 90 g   |

! The board cameras come without power supply unit. Recommended power supply unit: VCA-12V-0.6A.











CCTV cameras  
 IP cameras  
 Lenses  
 Camera housings  
 Dome systems  
 Illuminators  
 Monitors



**Lenses for board cameras**

| Part no. | Description                                       |
|----------|---|
| 13836    | Lens 3.6 mm, suitable for board camera VCK-850P/W |
| 13860    | Lens 6 mm, suitable for board camera VCK-850P/W   |
| 13880    | Lens 8 mm, suitable for board camera VCK-850P/W   |
| 13816    | Lens 16 mm, suitable for board camera VCK-850P/W  |

**Accessories: Cameras**

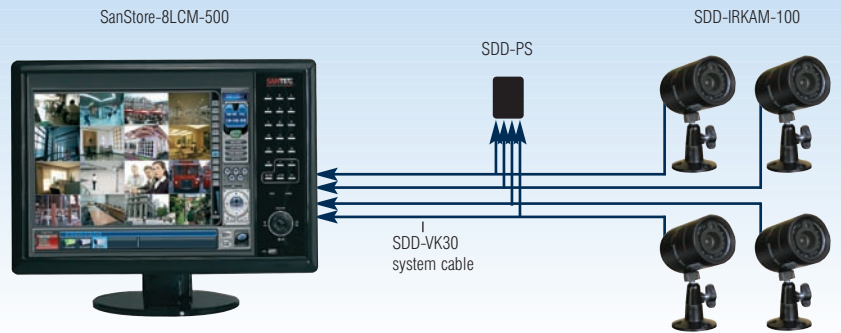
| Part no.    | Description   |   |
|-------------|---|---|
| VA-13WIK    | Wall bracket with integrated cable management for indoor installation <ul style="list-style-type: none"> <li>material: metal</li> <li>length: 130 mm</li> <li>loading capacity: 3 kg</li> <li>colour: beige</li> </ul>  |    |
| VA-13WIK/10 | 10 pieces VA-13WIK in covering box  |   |
| RC-60       | Control unit for SANTEC camera VTC-682DNP <ul style="list-style-type: none"> <li>required for adjusting camera VTC-682DNP</li> <li>1.5 m connection cable</li> </ul>  |    |
| WB-HDH42/W  | Wall bracket for SANTEC cameras VTC-HDH422P/W, VTC-HDH432IRP/W and VTC-HDH442WDP/W <ul style="list-style-type: none"> <li>dimensions (LxHxW): 251 x 155 x 173 mm</li> </ul>   |   |
| WB-HDH359/W | Wall bracket for SANTEC camera VTC-HDH359IRP/W <ul style="list-style-type: none"> <li>dimensions (LxHxW): 280 x 137 x 104 mm</li> </ul>   |  |
| JB-100/W    | Connection/installation box for SANTEC cameras VTC-279IRP/W, VTC-282IRP/W, VTC-289IRP/W, VTC-249IRP/W, SNC-565IR/W and SNC-521IR/W <ul style="list-style-type: none"> <li>for easier installation of cable connections, etc.</li> <li>water-proof IP-66</li> <li>dimensions (DxH): 107 x 56 mm</li> </ul> |  |
| CMP-200/W   | Corner and pole bracket for SANTEC cameras VTC-279IRP/W, VTC-282IRP/W, VTC-289IRP/W, VTC-249IRP/W, SNC-565IR/W, SNC-521IR/W and VTC-HDH359IRP/W <ul style="list-style-type: none"> <li>dimensions: 162 mm wide</li> <li>tightening straps required (optionally available)</li> </ul>                      |  |
| SPB-CMP     | Set of tightening straps for bracket CMP-200/W <ul style="list-style-type: none"> <li>stainless steel</li> </ul>  |  |
| COV-IN6272W | Clear dome bubble with white inside cover for SANTEC cameras VTC-262P/W and VTC-272WDP/W  |  |
| CABD322W    | Dome cover (white) for camera housing for SANTEC dome camera VTC-HDH322P  |  |
| CABD352W    | Dome cover (white) for camera housing for SANTEC dome camera VTC-HDH352P  |  |

## SDD single-cable camera system

### Plug & Play

Simple and easy installation via SDD-VK30 system cable (video + voltage).






Cameras are powered by power supply unit SDD-PS via system cable.



The SDD single-cable camera system makes the installation of a video surveillance system easy, fast and cost-efficient. The image transmission and power run through the SDD system cable with max. 90 m length. Power supply unit SDD-PS feeds to up to 4 cameras.

The SDD single-cable system perfectly connects with SANTEC digital recorders in order to easily create a cost-saving system. Recommended devices are the 4-channel recorder of the SanStore series or the LCD/all-in-one 8-channel digital recorder SanStore-8LCM-500 with built-in LCD monitor.

### SDD single-cable camera system

| Part no.      | Description   |   |
|---------------|---|---|
| SDD-IRKAM-100 | SANTEC 1/4" day/night colour camera in weather-proof housing <ul style="list-style-type: none"> <li>• resolution: 420 TVL</li> <li>• video: PAL</li> <li>• built-in lens, focal length 4 mm</li> <li>• minimum illumination: 0.9 lux</li> <li>• video output: 1x BNC</li> <li>• 30 m system cable (SDD-VK-30)</li> <li>• built-in IR-LEDs</li> <li>• range: up to 8 m</li> <li>• voltage: 12 V DC</li> <li>• weather-proof housing, class IP-66</li> <li>• dimensions (DxL): 52 x 75 mm</li> <li>• weight: 600 g</li> </ul> |  |
| SDD-PS        | Power supply unit and power patch cable (1 to 4) for usage with system cables SDD-VK-10 and SDD-VK-30 <ul style="list-style-type: none"> <li>• 12 V DC / 5 A</li> <li>• power patch cable (1 to 4)</li> </ul>   |  |
| SDD-VK-10     | System cable 10 m (video and power supply) for SanStore DIY digital recorder  |  |
| SDD-VK-30     | System cable 30 m (video and power supply) for SanStore DIY digital recorder  |  |
| SDD-ADAPT     | Link adapter (to link 2 cables) for SDD system cable SDD-VK-30  |  |



**SANTEC IP cameras**



SNC-390DN/W

SNC-521IR/W

SNC-565IR/W





SNC-620/W

SNC-670ID/W


**SANTEC IP cameras with D1 (720 x 576) resolution**

- day/night colour camera
- mechanical IR cut filter
- high sensitivity
- S/N ratio > 52 dB
- OSD menu to adjust the camera module
- OSD configuration also possible via network
- max. resolution: D1 (720 x 576)
- compression: MJPEG/MPEG4
- picture rate at max. resolution: 30 fps
- video streaming: single / double / triple
- digital PTZ controlling
- motion detection, privacy zones, schedule
- picture upload: FTP/e-mail/HTTP
- alarm input/output: 1x/1x
- audio input/output: 1x/1x; 3.5 mm jack plug
- communications: RS-485
- Ethernet: 100 Mbit, RJ-45, 10 Base-T/100 Base-TX
- voltage: 12 V DC
- operating temperature: -10° C to +50° C
- relative humidity max. 80%
- SanView-Lite software included in the delivery

**SANTEC IP cameras with D1 (720 x 576) resolution**

| Part no.                          | Description  |   |
|-----------------------------------|--|---|
| <b>SNC-390DN/W</b><br><i>NEW!</i> | <p>SANTEC day/night IP box camera with PoE (Power-over-Ethernet)</p> <ul style="list-style-type: none"> <li>• chip: 1/3" Sony Super HAD CCD 580/700 TVL</li> <li>• lens mount: C/CS-Mount</li> <li>• min. illumination: 0.05 / 0.0002 lux</li> <li>• multi-language OSD</li> <li>• PoE: IEEE 802.3af, midspan</li> <li>• power consumption: max. 4.2 watt</li> <li>• dimensions (WxHxD): 65 x 65 x 120 mm</li> <li>• weight: 370 g</li> <li>• lens not included in the delivery</li> </ul>   |   |
| <b>SNC-521IR/W</b><br><i>NEW!</i> | <p>SANTEC day/night IP camera in weather-proof housing with IR-LEDs and PoE</p> <ul style="list-style-type: none"> <li>• weather-proof housing: IP-66</li> <li>• 48 IR-LEDs: range up to 40 m</li> <li>• split glass technology</li> <li>• chip: 1/3" Sony Super HAD CCD 580/700 TVL</li> <li>• lens: 2.8-12.0 mm, DC-controlled</li> <li>• min. illumination: 0.05 / 0.0002 lux</li> <li>• multi-language OSD</li> <li>• PoE: IEEE 802.3af, midspan</li> <li>• power consumption: max. 4.2 watt without IR-LEDs / 7.2 watt with IR-LEDs</li> <li>• dimensions (WxHxD): 92 x 88 x 296 mm</li> <li>• weight: 600 g</li> </ul>       |  |
| <b>SNC-565IR/W</b><br><i>NEW!</i> | <p>SANTEC day/night IP camera in weather-proof housing with motor zoom lens, IR-LEDs and PoE. Specifications identical to SNC-521IR/W except:</p> <ul style="list-style-type: none"> <li>• chip: 1/4" Interline Transfer CCD 540 TVL</li> <li>• lens: 3.8-38.0 mm, DC-controlled, motor zoom</li> <li>• 10 IR-LEDs: range up to 40 m</li> <li>• split glass technology</li> <li>• min. illumination: 0.7 lux / 0 lux with IR-LEDs</li> <li>• English OSD</li> <li>• power consumption: max. 4.8 watt without IR-LEDs / 7.2 watt with IR-LEDs</li> <li>• dimensions (WxHxD): 101 x 97 x 286 mm</li> <li>• weight: 1.7 kg</li> </ul> |  |
| <b>SNC-620/W</b><br><i>NEW!</i>   | <p>SANTEC day/night IP dome camera in weather-proof housing with PoE</p> <ul style="list-style-type: none"> <li>• weather-proof housing: IP-66</li> <li>• chip: 1/3" Sony Super HAD CCD 580 TVL</li> <li>• lens: 2.8-12.0 mm, DC-controlled</li> <li>• min. illumination: 0.05 / 0.0002 lux</li> <li>• multi-language OSD</li> <li>• PoE: IEEE 802.3af, midspan</li> <li>• power consumption: max. 4.2 watt</li> <li>• dimensions (DxH): 130 x 111 mm</li> <li>• weight: 600 g</li> </ul>  |  |

**SANTEC IP cameras with D1 (720 x 576) resolution**

| Part no.                              | Description   |
|---------------------------------------|---|
| <p><b>NEW!</b></p> <p>SNC-670ID/W</p> | <p>SANTEC day/night IP PTZ camera in weather-proof housing</p> <ul style="list-style-type: none"> <li>• chip: 1/4" Sony Super HAD CCD 540 TVL</li> <li>• lens: 3.8-38.0 mm, DC-controlled, motor zoom</li> <li>• min. illumination: 0.7 / 0.02 lux</li> <li>• pan angle: endless 360°</li> <li>• pan speed: 10-240 °/sec</li> <li>• tilt angle: 90°</li> <li>• tilt speed: 10-240 °/sec</li> <li>• number of preset positions: 165</li> <li>• number of tours: 8</li> <li>• number of patterns: 8</li> <li>• number of auto scans: 1</li> <li>• English OSD</li> <li>• power consumption: max. 11.5 watt</li> <li>• dimensions (DxH): 167 x 157 mm</li> <li>• weight: 1.6 kg</li> </ul>  |




**SANTEC IP mega pixel cameras (available as of January 2010)**



**SANTEC IP cameras with 1.3 mega pixel resolution**

- chip: 1/3" 1.3 mega pixel progressive scan CMOS
- min. illumination: 1.0 / 0.3 lux
- day/night colour camera
- mechanical IR cut filter
- S/N ratio > 50 dB
- resolution:
  - SXGA (1280 x 1024), 15 fps
  - HD 720 (1280 x 720), 15 fps
  - VGA (640 x 480), 30 fps
  - QVGA (320 x 240), 30 fps
- compression: MJPEG/MPEG4/H.264
- video streaming: single / double / triple
- digital PTZ controlling
- motion detection, schedule
- picture upload: FTP/e-mail/HTTP
- alarm input/output: 1x/1x
- audio input/output: 1x/1x; 3.5 mm jack plug
- communications: RS-485
- Ethernet: 100 Mbit, RJ-45, 10 Base-T/100 Base-TX
- PoE: IEEE 802.3af, midspan
- voltage: 12 V DC
- operating temperature: -10° C to +50° C
- relative humidity max. 80%
- SanView-Lite software included in the delivery

**SANTEC IP cameras with 1.3 mega pixel resolution**

| Part no.                              | Description  |
|---------------------------------------|--|
| <p><b>NEW!</b></p> <p>SNC-3901MDN</p> | <p>SANTEC 1.3 mega pixel IP day/night box camera with PoE</p> <ul style="list-style-type: none"> <li>• lens mount: C/CS-mount</li> <li>• power consumption: max. 4.2 watt</li> <li>• dimensions (WxHxD): 65 x 65 x 120 mm</li> <li>• weight: 370 g</li> </ul>   |
| <p><b>NEW!</b></p> <p>SNC-6201M</p>   | <p>SANTEC 1.3 mega pixel IP day/night dome camera in weather-proof housing and PoE</p> <ul style="list-style-type: none"> <li>• weather-proof housing: IP-66</li> <li>• lens: 3.5-16.0 mm, DC-controlled</li> <li>• power consumption: max. 4.2 watt</li> <li>• dimensions (DxH): 130 x 111 mm</li> <li>• weight: 600 g</li> </ul>    |
| <p><b>NEW!</b></p> <p>SNC-5211MIR</p> | <p>SANTEC 1.3 mega pixel IP day/night camera in weather-proof housing with IR-LEDs and PoE</p> <ul style="list-style-type: none"> <li>• weather-proof housing: IP-66</li> <li>• 48 IR-LEDs: range up to 40 m</li> <li>• split glass technology</li> <li>• lens: 3.5-16.0 mm, DC-controlled</li> <li>• power consumption: max. 4.2 watt without IR-LEDs / 7.2 watt with IR-LEDs</li> <li>• dimensions (WxHxD): 92 x 88 x 296 mm</li> <li>• weight: 700 g</li> </ul>  |

**!** 1. The lenses shown in the pictures above are not included in the delivery of IP box cameras.  
 2. For 12 V DC power supply we recommend to use the following power supply unit: VCA-12V-1.3A  
 3. For PoE power supply we recommend to use SANTEC PoE switch.






## Lenses

For the SANTEC cameras, suitable SANTEC lenses are also available. You will find them in the tables below. In case you need any other lenses than the ones listed in this catalogue (e.g. PENTAX, TAMRON or FUJINON lenses), please don't hesitate to contact us. We would be happy to assist you.



### Lenses for SANTEC cameras

| Camera      | Resolution     | Sensor | 14131DN/B<br>1/3", 2.8-12.0 mm<br>DC, CS-mount<br>day/night | 14141DN/B<br>1/3", 3.0-8.5 mm<br>DC, CS-mount<br>day/night | 14161DN<br>1/3", 7.5-50.0 mm<br>DC, CS-mount<br>day/night | 15161DN<br>1/3", 5.0-50.0 mm<br>DC, CS-mount<br>day/night | 17141DN<br>1/3", 2.8-6.0 mm<br>DC, CS-mount<br>day/night |
|-------------|----------------|--------|---|--|---|---|--|
| VTC-8100P   | D1             | 1/3"   | X   | X  | X   |   |  |
| VTC-8112P   | D1             | 1/3"   | X   | X  | X   |   |  |
| VTC-8200P   | D1             | 1/3"   | X   | X  | X   |   |  |
| VTC-8212P   | D1             | 1/3"   | X   | X  | X   |   |  |
| VTC-8300WDP | D1             | 1/3"   | X   | X  | X   |   |  |
| VTC-8312WDP | D1             | 1/3"   | X   | X  | X   |   |  |
| SNC-390DN/W | D1             | 1/3"   | X   | X  | X   |   |  |
| SNC-3901MDN | 1.3 mega pixel | 1/3"   |   |  |   | X   | X  |

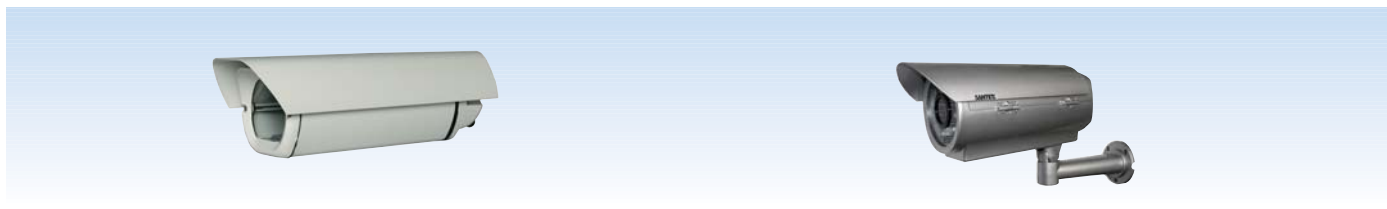
### Lenses for SANTEC cameras

| Part no.  | Description  |   |
|-----------|--|---|
| 14131DN/B | 1/3" 2.8 - 12.0 mm lens<br><ul style="list-style-type: none"> <li>format: 1/3"</li> <li>mount: CS</li> <li>focal length: 2.8 - 12.0 mm</li> <li>F-stop: F1.2</li> <li>aperture control: DC</li> </ul>                | <ul style="list-style-type: none"> <li>day/night: yes</li> <li>aspherical</li> <li>angle of view (horizontal): 84° - 24°</li> <li>dimensions (WxHxD): 48 x 35 x 60 mm</li> <li>weight: 58 g</li> </ul>     |
| 14141DN/B | 1/3" 3.0 - 8.5 mm lens<br><ul style="list-style-type: none"> <li>format: 1/3"</li> <li>mount: CS</li> <li>focal length: 3.0 - 8.5 mm</li> <li>F-stop: F1.0</li> <li>aperture control: DC</li> </ul>                  | <ul style="list-style-type: none"> <li>day/night: yes</li> <li>aspherical</li> <li>angle of view (horizontal): 78° - 32°</li> <li>dimensions (WxHxD): 35 x 50 x 50 mm</li> <li>weight: 60 g</li> </ul>   |
| 14161DN   | 1/3" 7.5 - 50.0 mm lens<br><ul style="list-style-type: none"> <li>format: 1/3"</li> <li>mount: CS</li> <li>focal length: 7.5 - 50.0 mm</li> <li>F-stop: F1.2</li> <li>aperture control: DC</li> </ul>                | <ul style="list-style-type: none"> <li>day/night: yes</li> <li>aspherical</li> <li>angle of view (horizontal): 36° - 5°</li> <li>dimensions (WxHxD): 38.8 x 50 x 65 mm</li> <li>weight: 62 g</li> </ul>  |
| 15161DN   | 1/3" 5.0 - 50.0 mm 1.3 mega pixel lens<br><ul style="list-style-type: none"> <li>format: 1/3"</li> <li>mount: CS</li> <li>focal length: 5.0 - 50.0 mm</li> <li>F-stop: F1.6</li> <li>aperture control: DC</li> </ul> | <ul style="list-style-type: none"> <li>day/night: yes</li> <li>aspherical</li> <li>angle of view (horizontal): 51° - 5°</li> <li>dimensions (WxHxD): 40 x 56 x 59 mm</li> <li>weight: 85 g</li> </ul>    |
| 17141DN   | 1/3" 2.8 - 6.0 mm 3.0 mega pixel lens<br><ul style="list-style-type: none"> <li>format: 1/3"</li> <li>mount: CS</li> <li>focal length: 2.8 - 6.0 mm</li> <li>F-stop: F1.3</li> <li>aperture control: DC</li> </ul>   | <ul style="list-style-type: none"> <li>day/night: yes</li> <li>aspherical</li> <li>angle of view (horizontal): 84° - 46°</li> <li>dimensions (WxHxD): 38 x 46 x 53 mm</li> <li>weight: 55 g</li> </ul>   |

### Adjusting tools

| Part no.        | Description   |   |
|-----------------|---|---|
| 13001           | Extender to double the focal length, CS-mount   |  |
| ND-3-Graufilter | Filter to adjust automatically controlled lenses<br>55 mm filter thread   |  |
| 15001           | Measurement for DC- and AI-controlled lenses  |   |
| 15002           | Installation of a camera with lens into a weather-proof housing as well as measurement and lens connection including 2 m cable (coax and voltage) |   |

## Camera housings



### HEL-30K, HEL-30D

The SANTEC standard weather-proof housings with sunshield and integrated heating are made of aluminium and are IP-66 classified. HEL-30D and HEL-30K are technically identical, but HEL-30D comes without sunshield and heating.

### HEL-62D, HEL-IR65D, HEL-IR75D





These weather-proof housings are IP-66 classified and are made of aluminium. They are equipped with **built-in professional IR-LEDs** which have a **range of up to 170 m**. The delivery includes a wall bracket with integrated cable management. You will find more information on wavelength for IR-LEDs on page 21. **HEL-62D is a new housing with the same design but has no IR-LEDs.**

### Product overview: Camera housings



| Part no.  | Classification | Heating | Fan | Internal dimensions (WxHxD) mm | External dimensions (WxHxD) mm | Weight | Suitable wall bracket |
|-----------|----------------|---------|-----|--------------------------------|--------------------------------|--------|-----------------------|
| HEL-30K   | IP-66          | 230 V   | --  | 73x97x290                      | 122x116x450                    | 3.2 kg | WBJ-26                |
| HEL-30D   | IP-66          | --      | --  | 73x97x290                      | 122x116x420                    | 2.6 kg | WBJ-26                |
| HEL-62D   | IP-66          | 230 V   | yes | 90x65x180                      | 150x160x374                    | 3.0 kg | included              |
| HEL-IR65D | IP-66          | 230 V   | yes | 90x65x180                      | 150x160x374                    | 3.5 kg | included              |
| HEL-IR75D | IP-66          | 230 V   | yes | 90x65x180                      | 150x160x374                    | 3.5 kg | included              |

! Housings HEL-30K, HEL-62D, HEL-IR65D and HEL-IR75D are also available as ready assembled sets (see page 6-7). Special housing painting is available on demand. Information regarding the range of IR-LEDs for housings HEL-IR65D/-75D are available on page 21 in the IR illuminators chapter.

### Accessories: Camera housings

| Part no.   | Description  |   |
|------------|--|---|
| WBJ-26     | Wall bracket for housings of HEL-series (not applicable for HEL-62D, HEL-IR65D, and HEL-IR75D)   |  |
|            | <ul style="list-style-type: none"> <li>material: aluminum</li> <li>colour: cream white (RAL9002)</li> <li>length: 285 mm</li> <li>loading capacity: 25 kg</li> </ul> |   |
| VA-CW      | Corner adapter for WBJ-26  |  |
|            | <ul style="list-style-type: none"> <li>loading capacity: 30 kg</li> </ul>  |   |
| VA-SFP     | Pole bracket adapter for WBJ-26  |  |
|            | <ul style="list-style-type: none"> <li>diameter: 65 - 110 mm</li> <li>width: 175 mm</li> <li>height: 110 mm</li> <li>loading capacity: 50 kg</li> </ul>              |   |
| HEL-IRMAST | Pole bracket and corner adapter for weather-proof housings HEL-62D, HEL-IR65D and HEL-IR75D  |  |
|            | <ul style="list-style-type: none"> <li>dimensions (WxHxD): 140 x 120 x 75 mm</li> <li>for pole diameters of 90 - 170 mm</li> </ul>                                   |   |

### Power supply units for camera housings

| Part no. | Description  |   |
|----------|--|---|
| HEL-PS12 | SANTEC built-in power supply unit 230 V AC / 12 V DC, 350 mA; for SANTEC housings of HEL-30 series |  |
|          | <ul style="list-style-type: none"> <li>dimensions: 81 x 44 x 54 mm</li> </ul>                      |   |
| HEL-PS24 | SANTEC built-in power supply unit 230 V AC / 24 V DC, 350 mA; for SANTEC housings of HEL-30 series |  |
|          | <ul style="list-style-type: none"> <li>dimensions: 81 x 44 x 54 mm</li> </ul>                      |   |

## SANTEC dome systems



### VDC-610ID/W

This compact day/night camera comes in a vandal-proof and weather-proof housing (IP-66). The camera has a **10x optical and a 10x digital zoom** with automatic focus. The pan and tilt speed is up to 200°/sec and the **pan range is 360° endless**.

**Special features:**

- 165 preset positions
- 8 tours
- 4 privacy zones
- **high resolution of 540 TVL**
- communication: RS-485; protocol: Pelco D/P

### VDC-285ID, -325ID, -435ID, -535ID

These cameras are fast and compact day/night dome cameras with integrated optical motor zoom (18x to 36x, depending on model) and 12x digital zoom. The cameras comprise 240 presets, 8 alarm inputs and 360° endless pan range. These dome cameras are suitable for a system integration with our digital recorders.

**Special features:**

- depending on model: up to 36x optical zoom and 12x digital zoom
- up to 240 presets
- 360° endless pan range
- 8 privacy zones
- 180° digital flip or 90° auto-flip function, depending on model
- vector scan
- WDR function (not for VDC-285ID)
- Pelco D/P, SANTEC and other protocols

### VDC-290AIOD, VDC-435AIOD / WBJB

VDC-290AIOD and VDC-435AIOD are technically identical to indoor dome cameras VDC-285ID and VDC-435ID, except for the fact that they are already installed into an outdoor housing. Outdoor dome cameras VDC-290AIOD-WBJB and VDC-435AIOD-WBJB are delivered with wall bracket WBJB-HDH-306 (incl. 24 V AC power supply unit).

### Product overview: SANTEC dome systems

| Part no.         | CCD format     | TVL | Zoom area | Lux colour/bw | Focal length (mm) | Privacy zones | Alarm inputs | Alarm outputs | Bubble colour | Voltage | Dimensions (DxH) mm | Weight |
|------------------|----------------|-----|-----------|---------------|-------------------|---------------|--------------|---------------|---------------|---------|---------------------|--------|
| VDC-610ID/W      | 1/4" Super HAD | 540 | 10/10     | 0.7/0.02      | 3.8-38            | 4             | 4            | --            | tinted        | 12 V DC | 167 x 157           | 1.5 kg |
| VDC-285ID        | 1/4" Super HAD | 480 | 22/11     | 1.0/0.02      | 3.9-85.8          | 8             | 8            | 4             | tinted        | 24 V AC | 125 x 200           | 1.2 kg |
| VDC-325ID        | 1/4" ExView    | 540 | 18/12     | 0.7/0.1       | 4.1-73.8          | 8             | 8            | 4             | tinted        | 24 V AC | 125 x 200           | 1.2 kg |
| VDC-435ID        | 1/4" ExView    | 540 | 26/12     | 1.0/0.07      | 3.5-91            | 8             | 8            | 4             | tinted        | 24 V AC | 125 x 200           | 1.2 kg |
| VDC-535ID        | 1/4" ExView    | 540 | 36/12     | 1.4/0.1       | 3.4-122.4         | 8             | 8            | 4             | tinted        | 24 V AC | 125 x 200           | 1.2 kg |
| VDC-290AIOD      | 1/4" Super HAD | 480 | 22/11     | 1.0/0.02      | 3.9-85.8          | 8             | 8            | 4             | tinted        | 24 V AC | 234 x 278           | 4.5 kg |
| VDC-435AIOD      | 1/4" ExView    | 540 | 26/12     | 1.0/0.07      | 3.5-91            | 8             | 8            | 4             | tinted        | 24 V AC | 234 x 278           | 4.5 kg |
| VDC-290AIOD-WBJB | 1/4" Super HAD | 480 | 22/11     | 1.0/0.02      | 3.9-85.8          | 8             | 8            | 4             | tinted        | 24 V AC | 234 x 278           | 4.5 kg |
| VDC-435AIOD-WBJB | 1/4" ExView    | 540 | 26/12     | 1.0/0.07      | 3.5-91            | 8             | 8            | 4             | tinted        | 24 V AC | 234 x 278           | 4.5 kg |

! If you have questions regarding control options, e.g. in connection with our keyboards and digital recorders, please don't hesitate to contact us.

### Accessories: SANTEC dome systems

| Part no.     | Description  |  |
|--------------|--|--|
| WH-610/W     | Wall bracket for dome cameras VDC-610ID/W and SNC-670ID/W<br>• dimensions (WxHxD): 172 x 180 x 270 mm • weight 1.38 kg   |  |
| MH-610/W     | Pole bracket for pole mounting of dome cameras VDC-610ID/W and SNC-670ID/W<br>• dimensions (WxHxD): 146 x 185 x 40 mm  |  |
| EH-610/W     | Corner bracket for corner mounting of dome cameras VDC-610ID/W and SNC-670ID/W<br>• dimensions (WxHxD): 210 x 178 x 122 mm   |  |
| VCA-12V-2A/A | SANTEC power supply unit, especially for outdoor installation, for dome cameras VDC-610ID/W and SNC-670ID/W<br>• weather-proof housing IP-66 • especially for outdoor installations • input voltage 230 V AC<br>• output voltage 12 V DC / 2.0 A • dimensions (WxHxD): 110 x 180 x 90 mm |  |
| HCS251-HV    | Ceiling mount bracket for SANTEC dome cameras (not applicable for VDC-610ID/W and SNC-670ID/W)<br>• dimensions (HxD): 212 x 220 mm • including tinted dome bubble  |  |
| HDH-306-IS   | SANTEC indoor housing for SANTEC dome cameras (not applicable for VDC-610ID/W and SNC-670ID/W)<br>• tinted dome bubble • built-in fan • dimensions (DxH): 210 x 278 mm<br>• weight: 2.3 kg • voltage: 24 V AC / 5A • recommended power supply unit: VCA-500                              |  |

**Accessories: SANTEC dome systems**

| Part no.     | Description   |   |
|--------------|---|---|
| HDH-306-OC   | SANTEC weather-proof housing for SANTEC dome cameras (not applicable for VDC-610ID/W) <ul style="list-style-type: none"> <li>classification: IP-66</li> <li>clear dome bubble</li> <li>built-in heating</li> <li>built-in fan</li> <li>connection for heating, fan and dome</li> </ul>          | <ul style="list-style-type: none"> <li>dimensions (DxH): 234 x 278 mm</li> <li>weight: 2.9 kg</li> <li>voltage: 24 V AC</li> <li>operating temperature: -45° to +50° C</li> <li>recommended power supply unit: VCA-600/A</li> </ul>  |
| CX-HDH-306   | Dome cable set for HDH-306 housing; for set-up with wall bracket installation box WBJB-HDH-306 and WM-HDH-306   |    |
| WM-HDH-306   | Wall bracket for dome housing HDH-306-IS and HDH-306-OC <ul style="list-style-type: none"> <li>dimensions (WxHxD): 120 x 140 x 260 mm</li> </ul>  |    |
| WBJB-HDH-306 | Wall bracket including installation box and power supply unit for dome housing HDH-306-IS and HDH-306-OC <ul style="list-style-type: none"> <li>built-in power supply unit 230 V AC /24 V AC</li> <li>dimensions (WxHxD): 174 x 215 x 270 mm</li> </ul>   |    |
| CM-HDH-306   | Ceiling bracket for dome housing HDH-306-IS and HDH-306-OC <ul style="list-style-type: none"> <li>tube length: 400 mm</li> </ul>  |    |
| HCM-150      | Corner adapter for wall bracket WM-HDH-306 <ul style="list-style-type: none"> <li>dimensions (WxD): 185 x 121 mm</li> </ul>   |    |
| HCM-151      | Pole bracket for poles with 80-150 mm diameter; for wall bracket WM-HDH-306 <ul style="list-style-type: none"> <li>dimensions (WxD): 180 x 121 mm</li> </ul>  |    |
| HCM-200      | Goose neck bracket for upright mounting; for SANTEC dome housing HDH-306-IS and HDH-306-OC <ul style="list-style-type: none"> <li>dimensions (WxD): 1006 x 628 mm</li> </ul>  |   |
| AP-HDH-306   | Installation adapter plate for WBJB-HDH-306; necessary for installation of WBJB-HDH-306 with HCM-150 or HCM-151   |    |
| BP-125-XE    | Basic installation plate for SANTEC dome cameras (not applicable for VDC-610ID/W and SNC-670ID/W)   |    |
| VCA-200      | SANTEC power supply unit (AC) for indoor installation; for dome cameras (not applicable for VDC-610ID/W and SNC-670ID/W) <ul style="list-style-type: none"> <li>input voltage 230 V AC</li> <li>output voltage: 24 V AC / 2.1 A</li> </ul>  | <ul style="list-style-type: none"> <li>dimensions (WxHxD): 100 x 65 x 135 mm</li> <li>double-sided cable connection</li> </ul>   |
| VCA-500      | SANTEC power supply unit (AC) for indoor installation; for dome cameras (not applicable for VDC-610ID/W and SNC-670ID/W) <ul style="list-style-type: none"> <li>to supply the heater/fan of the outdoor dome housing in case of outdoor installation</li> <li>input voltage 230 V AC</li> </ul> | <ul style="list-style-type: none"> <li>output voltage: 24 V AC max. 5 A</li> <li>dimensions (WxHxD): 110 x 65 x 170</li> </ul>   |
| VCA-600/A    | SANTEC power supply unit; especially for SANTEC dome cameras for outdoor installation (not applicable for VDC-610ID/W and SNC-670ID/W) <ul style="list-style-type: none"> <li>input voltage 230 V AC</li> <li>output voltage: 24 V AC max. 5 A</li> <li>weather-proof housing IP-66</li> </ul>  | <ul style="list-style-type: none"> <li>to supply the heater/fan of the outdoor dome housing</li> <li>dimensions (WxHxD): 110 x 180 x 90 mm</li> </ul>    |
| IF-24SR      | RS-232 to RS-485 converter / RS-485 repeater <ul style="list-style-type: none"> <li>converter or repeater function</li> <li>voltage 7-12 V DC</li> </ul>  | <ul style="list-style-type: none"> <li>dimensions (WxHxD): 95 x 23 x 55 mm</li> <li>weight: 155 g</li> </ul>   |
| IF-24BF      | BI-PHASE converter RS-485 / RS-422 <ul style="list-style-type: none"> <li>data in: BI-PHASE protocol (Bosch)</li> <li>data out: RS-485/RS-422</li> <li>voltage: 7-12 V DC</li> </ul>  | <ul style="list-style-type: none"> <li>dimensions (WxHxD): 95 x 23 x 55 mm</li> <li>weight: 150 g</li> </ul>   |

CCTV cameras

IP cameras

Lenses



Camera housings

Dome systems

Illuminators

Monitors

**Keyboards**

| Part no.               | Description  |
|------------------------|--|
| <p><b>KSC-2406</b></p> | <p>SANTEC keyboard with joystick; for SANTEC dome cameras</p> <ul style="list-style-type: none"> <li>• to control SANTEC speed dome cameras</li> <li>• to set-up cameras VTC-642DNP and VTC-682DNP</li> <li>• LCD display</li> <li>• control keys and joystick</li> <li>• RS-485 communication</li> <li>• protocols: SANTEC, Pelco D, Pelco P</li> <li>• power supply: 12 V DC (incl. in the delivery)</li> <li>• dimensions (BxHxT): 380 x 180 x 100 mm</li> <li>• weight: 1.6 kg</li> </ul>   |
| <p><b>KSC-3505</b></p> | <p>SANTEC keyboard with joystick; for SANTEC speed dome cameras and SanStore recorders</p> <ul style="list-style-type: none"> <li>• LCD display</li> <li>• control keys and joystick</li> <li>• RS-422/485 communication</li> <li>• Baud rate: 2400-230K Baud</li> <li>• communication: dome cameras max. 64 (simplex 256)</li> <li>• SanStore recorder max. 99</li> <li>• slave keyboard max. 8</li> <li>• junction-box</li> <li>• Pelco D/P protocols</li> <li>• voltage: 12 V DC, 6 W (including power supply unit)</li> <li>• dimensions (WxHxD): 390 x 95 x 190 mm</li> <li>• weight: 1.2 kg</li> </ul>  |



## Infrared illuminators



### IR-180GD

SANTEC IR-180GD is a **180° IR all-around illuminator** which has been developed for indoor applications. It has a wavelength of **850 nm** and illuminates a room with a range of **up to 100m<sup>2</sup>**.

### IR-60D, IR-100D, IR-200D

The SANTEC IR-LED illuminators IR-60D, IR-100D and IR-200D are equipped with the latest energy-saving IR-LEDs and have a long durability. They provide a homogeneous illumination. A twilight switch, an external switch contact and a 230 V power supply unit are integrated. The illuminators have a range of 60/100/200 m (depending on model).

### IR-12DN, -13DN, -35DN, -70DN

These SANTEC IR-LED illuminators are equipped with modern, energy-saving LED technology and have a long durability. A twilight switch and a 230 V power supply unit are integrated. The illuminators have a range of 8 m (IR-13DN), 15 m (IR-12DN), 35 m (IR-35DN) or 70 m (IR-70DN).

Models with 940 nm wavelength are available on demand.

### HEL-IR65D, HEL-IR75D

The innovative illuminators of the SANTEC HEL-IR series come in a high-quality weather-proof aluminium housing (IP-66). They have the latest IR LEDs built-in. **Depending on the model, the range is up to 70 m or 170 m.**



A wall bracket with integrated cable management is included in the delivery.

### Product overview: Infrared illuminators

| Part no.  | Classification | Voltage         | Wave-length | Range              | Angle | Power consumption | Dimensions (WxHxD) mm | Weight | Suitable wall bracket | Twilight switch |
|-----------|----------------|-----------------|-------------|--------------------|-------|-------------------|-----------------------|--------|-----------------------|-----------------|
| IR-180GD  | IP-44          | 24 V AC/12 V DC | 850 nm      | 100 m <sup>2</sup> | 180°  | 8 watt            | 108 x 70              | 450 g  | --                    | yes             |
| IR-12DN   | IP-65          | 230 V AC        | 850 nm      | 15 m               | 44°   | 16 watt           | 120 x 80 x 65         | 1.2 kg | WBJ-26S               | yes             |
| IR-13DN   | IP-65          | 230 V AC        | 850 nm      | 8 m                | 80°   | 16 watt           | 120 x 80 x 65         | 1.2 kg | WBJ-26S               | yes             |
| IR-35DN   | IP-65          | 230 V AC        | 850 nm      | 35 m               | 80°   | 32 watt           | 160 x 106 x 88        | 3.2 kg | WBJ-26S               | yes             |
| IR-70DN   | IP-65          | 230 V AC        | 850 nm      | 70 m               | 40°   | 32 watt           | 160 x 106 x 88        | 3.2 kg | WBJ-26S               | yes             |
| IR-60D    | IP-65          | 230 V AC        | 850 nm      | 60 m               | 80°   | 65 watt           | 210 x 140 x 143       | 3.5 kg | WBJ-26S               | yes             |
| IR-100D   | IP-65          | 230 V AC        | 850 nm      | 100 m              | 40°   | 65 watt           | 210 x 140 x 143       | 3.5 kg | WBJ-26S               | yes             |
| IR-200D   | IP-65          | 230 V AC        | 850 nm      | 200 m              | 10°   | 65 watt           | 210 x 140 x 143       | 3.5 kg | WBJ-26S               | yes             |
| HEL-IR65D | IP-66          | 230 V AC        | 850 nm      | 70 m               | 30°   | 22 watt           | 150 x 160 x 374       | 3.5 kg | included              | yes             |
| HEL-IR75D | IP-66          | 230 V AC        | 850 nm      | 170 m              | 12°   | 22 watt           | 150 x 160 x 374       | 3.5 kg | included              | yes             |

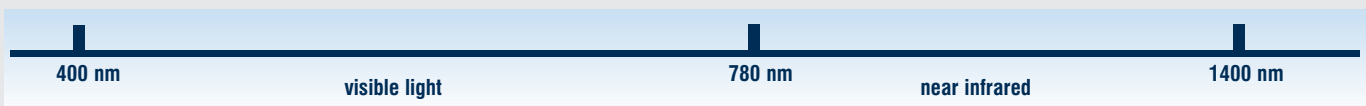
**!** The range of the built-in IR-LEDs strongly depends on the location and the surroundings. Strongly absorbent surfaces, e.g. dark, rough structures (floor, lawn or asphalt), may lead to a considerable reduction of the maximum range. The beam angle is equivalent to the maximum illumination cone. HEL-IR65D and HEL-IR75D are also available as ready-to use sets (see page 6)

### Accessories: Infrared illuminators

| Part no.   | Description  |   |
|------------|--|---|
| WBJ-26S    | Wall bracket for IR illuminators   |  |
|            | <ul style="list-style-type: none"> <li>length: 285 mm</li> <li>colour: black</li> </ul>  |   |
| HEL-IRMAST | Pole bracket and corner adapter for weather-proof housings HEL-62D, HEL-IR65D and HEL-IR75D  |  |
|            | <ul style="list-style-type: none"> <li>dimensions (WxHxD): 140 x 120 x 75 mm</li> <li>for pole diameters of 90 - 170 mm</li> </ul> |   |

## Functionality of infrared light

Infrared (IR) light shines in different light bands. For video recordings, the band “near infrared” (NIR) is key. It shines with wavelengths of 780 – 1400 nm and is above the visible light. Since SANTEC CCTV-cameras are able to detect this light, it is possible to record images even at night using IR illuminators.



CCTV-cameras either have day/night switching or black/white mode option. The SANTEC IR-LEDs operate on a wavelength of 850 nm and provide, together with SANTEC day/night CCTV-cameras, the ideal solution for perfect picture quality even at night.

Please bear in mind that light-absorbing surroundings may reduce the range of the IR-LEDs. Moreover, reflecting surfaces may lead to reflections in the video picture. Illuminators IR-12DN, IR-13DN, IR-35DN and IR-70DN are also available on request as DNX versions with 950 nm wavelength.

CCTV cameras

## White light illuminators

The quality of a video system highly depends on its different components.

Apart from cameras and their lenses, recording systems and cables, light sources play an increasingly important role, i.e. during the day as well as at night with artificial light sources. Besides IR light, there are several visible light sources. Halogen illuminators are not the ideal choice for CCTV applications because they are rather maintenance-demanding: the lifetime of a halogen illuminator is approx. 1,000 hours operating time. Consequently, it cannot be guaranteed that the surveillance unit operates reliably at all times. However, using SANTEC LED white light illuminators, an efficient and reliable illumination of the surroundings can be achieved. Compared to a 90 watt halogen lamp which generates a light of approx. 1,800 lumen, a white light illuminator with 120 watt power consumption generates a light of approx. 8,500 lumen. This means a factor of 4.7x, as much as a 90 watt halogen illuminator. Thanks to their high durability of at least 50,000 hours, SANTEC white light illuminators are a real alternative.

In order to achieve a comparable light result using a halogen illuminator, 500 watt would be required.

**NEW!**



IP cameras

Lenses






Example: WL-200



Example: WL-50

Camera housings

### White light illuminators

| Part no.                     | Description  |  |
|------------------------------|--|--|
| <b>WL-50</b><br><b>NEW!</b>  | SANTEC LED white light illuminator 8500 lumen <ul style="list-style-type: none"> <li>bright LED illuminator</li> <li>colour temperature 5650° - 7000° Kelvin</li> <li>luminous flux 8500 lumen</li> <li>range up to 75 m</li> <li>illumination angle 140°</li> <li>power consumption 120 watt</li> </ul> | <ul style="list-style-type: none"> <li>voltage 230 V AC</li> <li>built-in power supply unit</li> <li>silver aluminium housing</li> <li>class IP-65</li> <li>dimensions (WxHxD): 210 x 140 x 143 mm</li> <li>operating temperature: -20° to +50° C</li> <li>weight: 3.2 kg</li> </ul>  |
| <b>WL-100</b><br><b>NEW!</b> | SANTEC LED white light illuminator 8500 lumen <ul style="list-style-type: none"> <li>bright LED illuminator</li> <li>colour temperature 5650° - 7000° Kelvin</li> <li>luminous flux 8500 lumen</li> <li>range up to 150 m</li> <li>illumination angle 25°</li> <li>power consumption 120 watt</li> </ul> | <ul style="list-style-type: none"> <li>voltage 230 V AC</li> <li>built-in power supply unit</li> <li>silver aluminium housing</li> <li>class IP-65</li> <li>dimensions (WxHxD): 210 x 140 x 143 mm</li> <li>operating temperature: -20° to +50° C</li> <li>weight: 3.2 kg</li> </ul>  |
| <b>WL-200</b><br><b>NEW!</b> | SANTEC LED white light illuminator 8500 lumen <ul style="list-style-type: none"> <li>bright LED illuminator</li> <li>colour temperature 5650° - 7000° Kelvin</li> <li>luminous flux 8500 lumen</li> <li>range up to 300 m</li> <li>illumination angle 10°</li> <li>power consumption 120 watt</li> </ul> | <ul style="list-style-type: none"> <li>voltage 230 V AC</li> <li>built-in power supply unit</li> <li>silver aluminium housing</li> <li>class IP-65</li> <li>dimensions (WxHxD): 210 x 140 x 143 mm</li> <li>operating temperature: -20° to +50° C</li> <li>weight: 3.2 kg</li> </ul>  |

Dome systems

Illuminators

### Accessories: White light illuminators

| Part no.    | Description  |   |
|-------------|--|---|
| <b>WBJM</b> | Wall bracket for WL-series white light illuminators <ul style="list-style-type: none"> <li>length: 285 mm</li> <li>colour: silver</li> </ul> |  |

Monitors

## Flat screen monitors



The 15", 17" and 19" LCD monitors of the SLA-AX series are characterised by excellent picture quality and particularly fast refresh rate for CCTV technology. The monitors have 2 video inputs, VGA input, DVI input, audio input, integrated speakers and OSD menu. **The De-Interlace function, the "3D Comb Filter" and the front screen made of solid protective glass** are new enhancements. All monitors are delivered with a monitor stand.

### Product overview: Flat screen monitors

| Part no. | Diagonal  | Housing colour | Effective pixel     | OSD | PAL/NTSC | FBAS (BNC) | YC input | VGA/DVI | Audio | Voltage | Dimensions (WxHxD) mm | Weight |
|----------|-----------|----------------|---------------------|-----|----------|------------|----------|---------|-------|---------|-----------------------|--------|
| SLA-15AX | 38 cm/15" | black          | 1024 (H) x 768 (V)  | yes | yes      | 2          | 1        | 1       | 1     | 12 V DC | 340 x 285 x 53        | 3.1 kg |
| SLA-17AX | 43 cm/17" | black          | 1280 (H) x 1024 (V) | yes | yes      | 2          | 1        | 1       | 1     | 12 V DC | 372 x 324 x 53        | 4.2 kg |
| SLA-19AX | 48 cm/19" | black          | 1280 (H) x 1024 (V) | yes | yes      | 2          | 1        | 1       | 1     | 12 V DC | 420 x 360 x 55        | 4.5 kg |

**!** The dimensions mentioned above are without monitor stand. The delivery includes a power supply unit with 12 V DC output voltage.

## Flat screen monitors for industrial applications



The SLM series of SANTEC flat screen monitors have a black metal housing and are designed for industrial applications. They have a high-resolution TFT LCD display with high contrast ratio. Image adjustment is being done by an easy-to use OSD (on-screen-display) menu. The monitors feature picture-in-picture (PIP) and picture-to-picture, De-Interlace, 3D Comb Filter and a front screen made of solid protective glass. Additional features are automatic video norm detection (PAL/NTSC), STAND BY function, loop-through output and low energy consumption. An IR remote control is included in the delivery. All monitors up to 32" come with a fold-out monitor stand which can be dismantled. Optional wall brackets and monitor stands can be found in the chapter "monitor accessories".

### Product overview: Flat screen monitors for industrial usage

| Part no.   | Diagonal   | Housing colour | Effective pixel | OSD | PAL/NTSC | FBAS (BNC) | YC input | VGA/DVI | Audio | Voltage  | Dimensions (WxHxD) mm | Weight  |
|------------|------------|----------------|-----------------|-----|----------|------------|----------|---------|-------|----------|-----------------------|---------|
| SLM-840N   | 21cm/8.4"  | black          | 800 x 600       | yes | yes      | 2          | 1        | 1/0     | 1     | 12 V DC  | 228 x 180 x 65 mm     | 1.8 kg  |
| SLM-1040N  | 26cm/10.4" | black          | 800 x 600       | yes | yes      | 2          | 1        | 1/0     | 1     | 12 V DC  | 266 x 214 x 60 mm     | 2.0 kg  |
| SLM-1210N  | 31cm/12.1" | black          | 800 x 600       | yes | yes      | 2          | 1        | 1/0     | 1     | 12 V DC  | 300 x 239 x 61 mm     | 2.4 kg  |
| SLM-1500N  | 38cm/15"   | black          | 1024 x 768      | yes | yes      | 2          | 1        | 1/1     | 1     | 12 V DC  | 353 x 278 x 67 mm     | 3.3 kg  |
| SLM-1710N  | 43cm/17.1" | black          | 1280 x 1024     | yes | yes      | 2          | 1        | 1/1     | 1     | 12 V DC  | 387 x 322 x 67 mm     | 4.6 kg  |
| SLM-1910N  | 48cm/19.1" | black          | 1280 x 1024     | yes | yes      | 2          | 1        | 1/1     | 1     | 12 V DC  | 427 x 353 x 69 mm     | 4.9 kg  |
| SLM-2200N  | 55cm/22"   | black          | 1680 x 1050     | yes | yes      | 2          | 1        | 1/1     | 1     | 12 V DC  | 527 x 348 x 79 mm     | 6.0 kg  |
| SLM-2200NW | 55cm/22"   | white          | 1680 x 1050     | yes | yes      | 2          | 1        | 1/1     | 1     | 12 V DC  | 527 x 348 x 79 mm     | 6.0 kg  |
| SLM-2601N  | 65cm/26"   | black          | 1366 x 768      | yes | yes      | 2          | 1        | 1/1     | 1     | 230 V AC | 663 x 411 x 115 mm    | 10.5 kg |
| SLM-2601NW | 65cm/26"   | white          | 1366 x 768      | yes | yes      | 2          | 1        | 1/1     | 1     | 230 V AC | 663 x 411 x 115 mm    | 10.5 kg |
| SLM-3200N  | 80cm/32"   | black          | 1366 x 768      | yes | yes      | 2          | 1        | 1/1     | 1     | 230 V AC | 786 x 477 x 116 mm    | 14.0 kg |
| SLM-3200NW | 80cm/32"   | white          | 1366 x 768      | yes | yes      | 2          | 1        | 1/1     | 1     | 230 V AC | 786 x 477 x 116 mm    | 14.0 kg |
| SLM-4200N  | 105cm/42"  | black          | 1366 x 768      | yes | yes      | 2          | 1        | 1/1     | 1     | 230 V AC | 1018 x 611 x 135 mm   | 28.0 kg |
| SLM-4200NW | 105cm/42"  | white          | 1366 x 768      | yes | yes      | 2          | 1        | 1/1     | 1     | 230 V AC | 1018 x 611 x 135 mm   | 28.0 kg |

**!** The delivery includes a power supply unit with 12 V DC output voltage. Monitor models 26", 32" and 42" have a built-in power supply unit. Optional wall brackets and monitor stands can be found in chapter "monitor accessories" and on our website at: [www.santec-video.com](http://www.santec-video.com)

CCTV cameras

IP cameras

Lenses

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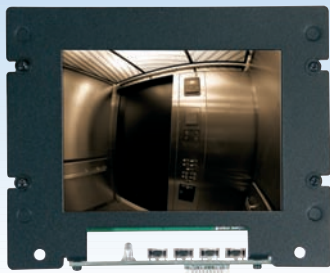
Illuminators

Monitors

CCTV cameras

## LCD Panels

**NEW!**



The SANTEC LCD panels of the SLD-series are high-quality TFT panels which are suitable for installations into machines, elevators, information systems and many more. The monitors come without a housing but with a rack, depending on model. On demand, the panels are also available with touch-screen function. The displays have a video input and a VGA input.

Further information are available on our website. Please don't hesitate to contact us if you have queries or questions.

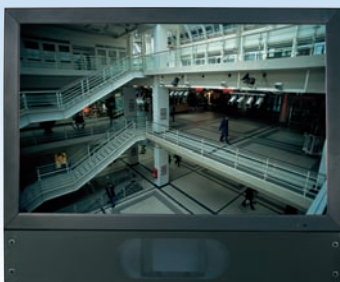
IP cameras

### LCD panels SLD monitor series

| Part no.   | Diagonal      | Housing colour | Effective pixel | Format |
|------------|---------------|----------------|-----------------|--------|
| SLD-350M   | 8.9 cm/3.5"   | black          | 640 x 480       | 4:3    |
| SLD-500M   | 12.7 cm/5.0"  | black          | 640 x 480       | 4:3    |
| SLD-500MW  | 12.7 cm/5.0"  | black          | 840 x 480       | 16:9   |
| SLD-560M   | 14.3 cm/5.6"  | black          | 640 x 480       | 4:3    |
| SLD-650M   | 16.5 cm/6.5"  | black          | 640 x 480       | 4:3    |
| SLD-700MW  | 17.8 cm/7.0"  | black          | 840 x 480       | 16:9   |
| SLD-800M   | 20.3 cm/8.0"  | black          | 640 x 480       | 4:3    |
| SLD-1020MW | 25.9 cm/10.2" | black          | 840 x 480       | 16:9   |

Lenses

## PVM extensions for SLM monitor series






The proven SLM monitors of 22", 26" and 32" can be extended to a "Public View Monitor" (PVM) by using the new SANTEC PVM extension box. This box is being installed underneath the monitor so that box and monitor form a unit. The box is pre-equipped with a WDR (wide dynamic range) camera which records excellent pictures even under backlight conditions. This unit is designed for retail, banking, etc.

Available as of January 2010!

Camera housings

### PVM extensions for SLM monitor series




| Part no.                   | Description  |  |
|----------------------------|--|--|
| PVM-SLM22/S<br>PVM-SLM22/W | PVM extension box for monitors SLM-2200N and SLM-2200NW <ul style="list-style-type: none"> <li>direct installation underneath the monitor</li> <li>dimensions (WxHxD): 527 x 86 x 71 mm</li> <li>weight: 2.0 kg</li> <li>integrated WDR colour camera</li> <li>1/3" CCD with 560 TVL resolution</li> <li>min. illumination 0.3 lux</li> </ul>  | <ul style="list-style-type: none"> <li>built-in Easy Focus lens 2.8 - 10 mm</li> <li>voltage 12 V DC directly from SLM monitor</li> <li>housing colour: PVM-SLM22/S: black<br/>PVM-SLM22/W: white</li> </ul>  <p>Available as of January 2010</p> |
| PVM-SLM26/S<br>PVM-SLM26/W | PVM extension box for monitors SLM-2601N and SLM-2601NW <ul style="list-style-type: none"> <li>direct installation underneath the monitor</li> <li>dimensions (WxHxD): 663 x 86 x 90 mm</li> <li>weight: 2.2 kg</li> <li>integrated WDR colour camera</li> <li>1/3" CCD with 560 TVL resolution</li> <li>min. illumination 0.3 lux</li> </ul>  | <ul style="list-style-type: none"> <li>built-in Easy Focus lens 2.8 - 10 mm</li> <li>voltage 12 V DC directly from SLM monitor</li> <li>housing colour: PVM-SLM26/S: black<br/>PVM-SLM26/W: white</li> </ul>  <p>Available as of January 2010</p> |
| PVM-SLM32/S<br>PVM-SLM32/W | PVM extension box for monitors SLM-3200N and SLM-3200NW <ul style="list-style-type: none"> <li>direct installation underneath the monitor</li> <li>dimensions (WxHxD): 786 x 86 x 115 mm</li> <li>weight: 2.8 kg</li> <li>integrated WDR colour camera</li> <li>1/3" CCD with 560 TVL resolution</li> <li>min. illumination 0.3 lux</li> </ul> | <ul style="list-style-type: none"> <li>built-in Easy Focus lens 2.8 - 10 mm</li> <li>voltage 12 V DC directly from SLM monitor</li> <li>housing colour: PVM-SLM32/S: black<br/>PVM-SLM32/W: white</li> </ul>  <p>Available as of January 2010</p> |

Dome systems

Illuminators

Monitors

## PVM monitors

| Part no.   | Description  |
|------------|--|
| SPVM-20AC  | <p>SANTEC 20" (50 cm) public view monitor in black metal housing with built-in WDR camera</p> <ul style="list-style-type: none"> <li>20" (50 cm) TFT colour LCD display</li> <li>contrast ratio 700:1</li> <li>brightness 450 cd/m<sup>2</sup></li> <li>resolution 800 x 600 pixel</li> <li>video De-Interlace and 3D Comb Filter</li> <li>front screen made of protective glass</li> <li>video input: 1x built-in camera</li> <li>1x external video input, DVI-input, S-video input</li> <li>1x camera video output</li> <li>1 x audio input</li> <li>multi-language monitor OSD</li> <li>built-in WDR day/night colour camera</li> <li>1/3" CMOS sensor with 540 TVL resolution</li> <li>min. illumination 0,04 lux</li> <li>built-in vario zoom lens 3 - 8 mm</li> <li>camera adjustments via camera OSD menu</li> <li>integrated speaker 2 x 2 watt stereo</li> <li>dimensions (WxHxD): 463 x 440 x 81 mm</li> <li>weight: 9 kg</li> <li>including IR remote control</li> <li>for VESA installation 100 x 100 mm</li> <li>voltage 100 - 240 V AC</li> </ul>                                   |
| SPVM-20ACM | <p>SANTEC 20" (50 cm) public view monitor in black metal housing with built-in WDR camera and multimedia function</p> <ul style="list-style-type: none"> <li>same specifications as SPVM-20AC but additionally with built-in CF card reader and USB storage device</li> <li>video formats: MPEG1, MPEG2, MPEG4 SP</li> <li>Divx 3.11/4.x/5.x (.AVI / .DAT/ .MPG)</li> <li>picture formats: .GIF / .BMP / .JPG</li> <li>VOV (video-over-video) function</li> <li>motion detection</li> <li>light sensor</li> <li>1 x alarm output, 1x monitor output</li> </ul>   |
| SPVM-26AC  | <p>SANTEC 26" (65 cm) public view monitor in black metal housing with built-in WDR camera</p> <ul style="list-style-type: none"> <li>26" (65 cm) TFT colour LCD display</li> <li>contrast ratio 3000:1</li> <li>brightness 450 cd/m<sup>2</sup></li> <li>resolution 1366 x 768 pixel</li> <li>video De-Interlace and 3D Comb Filter</li> <li>front screen made of protective glass</li> <li>video input: 1x built-in camera</li> <li>1x external video input, DVI-input, S-video input</li> <li>1x camera video output</li> <li>1 x audio input</li> <li>multi-language monitor OSD</li> <li>built-in WDR day/night colour camera</li> <li>1/3" CMOS sensor with 540 TVL resolution</li> <li>min. illumination 0.04 lux</li> <li>built-in vario zoom lens 3 - 8 mm</li> <li>camera adjustments via camera OSD menu</li> <li>integrated speakers 2 x 2 watt stereo</li> <li>dimensions (WxHxD): 648 x 481 x 90 mm</li> <li>weight: 12 kg</li> <li>including IR remote control</li> <li>for VESA installation 100 x 100 mm, 200 x 100 mm, 400 x 200 mm</li> <li>voltage 100 - 240 V AC</li> </ul>  |
| SPVM-26ACM | <p>SANTEC 26" (65 cm) public view monitor in black metal housing with built-in WDR camera and multimedia function</p> <ul style="list-style-type: none"> <li>same specifications as SPVM-26AC but additionally with built-in CF card reader and USB storage device</li> <li>video formats: MPEG1, MPEG2, MPEG4 SP</li> <li>Divx 3.11/4.x/5.x (.AVI / .DAT/ .MPG)</li> <li>picture formats: .GIF / .BMP / .JPG</li> <li>PIP (picture-in-picture) function</li> <li>PAP (picture-at-picture) function</li> <li>VOV (video-over-video) function</li> <li>motion detection</li> <li>light sensor</li> <li>1 x alarm output, 1x monitor output</li> </ul>   |
| SPVM-32AC  | <p>SANTEC 32" (80 cm) public view monitor in black metal housing with built-in WDR camera</p> <ul style="list-style-type: none"> <li>32" (80 cm) TFT colour LCD display</li> <li>contrast ratio 1500:1</li> <li>brightness 450 cd/m<sup>2</sup></li> <li>resolution 1366 x 768 pixel</li> <li>video De-Interlace and 3D Comb Filter</li> <li>front screen made of protective glass</li> <li>video input: 1x built-in camera</li> <li>1x external video input, DVI-input, S-video input</li> <li>1x camera video output</li> <li>1 x audio input</li> <li>multi-language monitor OSD</li> <li>built-in WDR day/night colour camera</li> <li>1/3" CMOS sensor with 540 TVL resolution</li> <li>min. illumination 0.04 lux</li> <li>built-in vario zoom lens 3 - 8 mm</li> <li>camera adjustments via camera OSD menu</li> <li>integrated speakers 2 x 2 watt stereo</li> <li>dimensions (WxHxD): 800 x 560 x 107 mm</li> <li>weight: 18 kg</li> <li>including IR remote control</li> <li>for VESA installation 400 x 200 mm</li> <li>voltage 100 - 240 V AC</li> </ul>                            |
| SPVM-32ACM | <p>SANTEC 32" (80 cm) public view monitor in black metal housing with built-in WDR camera and multimedia function</p> <ul style="list-style-type: none"> <li>same specifications as SPVM-32AC but additionally with built-in CF card reader and USB storage device</li> <li>video formats: MPEG1, MPEG2, MPEG4 SP</li> <li>Divx 3.11/4.x/5.x (.AVI / .DAT/ .MPG)</li> <li>picture formats: .GIF / .BMP / .JPG</li> <li>PIP (picture-in-picture) function</li> <li>PAP (picture-at-picture) function</li> <li>VOV (video-over-video) function</li> <li>motion detection</li> <li>light sensor</li> <li>1 x alarm output, 1x monitor output</li> </ul>   |

CCTV cameras

IP cameras

Lenses

Camera housings

Dome systems

Illuminators

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CCTV cameras

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Camera housings

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**Accessories: Monitors**

| Part no.     | Description   |  |
|--------------|---|--|
| VA-VESA-151  | VESA wall/ceiling bracket for all LCD monitors with dimensions of 7.5 x 7.5 cm or 10 x 10 cm <ul style="list-style-type: none"> <li>• wall distance up to 44 cm</li> <li>• thread 2x adjustable</li> <li>• pan/tilt</li> <li>• left/right</li> </ul>  | <ul style="list-style-type: none"> <li>• max. loading capacity 8 kg</li> <li>• material: metal</li> <li>• colour: black</li> </ul>                                  |
| VA-VESA-170  | Small VESA wall bracket for all LCD monitors with dimensions of 7.5 x 7.5 cm or 10 x 10 cm <ul style="list-style-type: none"> <li>• wall distance up to 12.8 cm</li> <li>• pan/tilt/turn 180°</li> <li>• max. loading capacity 12 kg</li> </ul>   | <ul style="list-style-type: none"> <li>• material: metal</li> <li>• colour: black</li> </ul>    |
| VA-VESA-171  | Short VESA wall bracket for all LCD monitors with dimensions of 7.5 x 7.5 cm or 10 x 10 cm <ul style="list-style-type: none"> <li>• wall distance 7.4 cm</li> <li>• pan/tilt/turn 180°</li> <li>• max. loading capacity 8 kg</li> </ul>   | <ul style="list-style-type: none"> <li>• material: metal</li> <li>• colour: black</li> </ul>    |
| SLM-STAND-M  | SANTEC stand for LCD monitors of SLM series; recommended for models from 15" to 26" <ul style="list-style-type: none"> <li>• adjustable height, tiltable</li> <li>• max. loading capacity 25 kg</li> </ul>  | <ul style="list-style-type: none"> <li>• dimensions (WxHxD): 350 x 384 x 220 mm</li> <li>• colour: black</li> </ul>   |
| SLM-RACK-15  | Rack mount adapter for LCD monitor SLM-1500N <ul style="list-style-type: none"> <li>• colour: black</li> </ul>  |   |
| SLM-RACK-17  | Rack mount adapter for LCD monitor SLM-1710N <ul style="list-style-type: none"> <li>• colour: black</li> </ul>  |  |
| SLM-RACK-19  | Rack mount adapter for LCD monitor SLM-1910N <ul style="list-style-type: none"> <li>• colour: black</li> </ul>  |  |
| SLM-EB-17N   | Metal rack for LCD monitor SLM-1710N <ul style="list-style-type: none"> <li>• colour: black</li> </ul>  |   |
| SLM-EB-19N   | Metal rack for LCD monitor SLM-1910N <ul style="list-style-type: none"> <li>• colour: black</li> </ul>  |  |
| SLM-EB-22N   | Metal rack for LCD monitor SLM-2200N <ul style="list-style-type: none"> <li>• colour: black</li> </ul>  |  |
| SLM-EB-22NW  | Metal rack for LCD monitor SLM-2200NW <ul style="list-style-type: none"> <li>• colour: white</li> </ul>   |  |
| LCD-DEHA135  | Ceiling bracket for LCD monitors; length: 0.7 - 1.35 m <ul style="list-style-type: none"> <li>• ceiling bracket, metal, black, loading capacity up to max. 12 kg</li> <li>• ceiling console for horizontal and inclined ceilings</li> <li>• cable mangement integrated into the tube</li> </ul> | <ul style="list-style-type: none"> <li>• rotation and tilting system, 20° tilting</li> <li>• universal installation adapter for VESA 75 x 75 mm, 100 x 100 mm</li> <li>• recommended for SLM-series monitors of 8.4" (21 cm) to 22" (55 cm)</li> </ul> |
| LCD-DEHA150X | Ceiling bracket for LCD monitors; length: 1.5 m <ul style="list-style-type: none"> <li>• ceiling bracket, metal, black, loading capacity up to max. 60 kg</li> <li>• ceiling console for horizontal and inclined ceilings</li> <li>• cable mangement integrated into the tube</li> </ul>        | <ul style="list-style-type: none"> <li>• rotation and tilting system, 20° tilting</li> <li>• universal installation adapter for VESA max. 960 x 512 mm</li> <li>• recommended for SLM-series monitors of 26" (65 cm) to 42" (105 cm)</li> </ul>        |
| LCD-DEHA300X | Ceiling bracket for LCD monitors; length: 3.0 m <ul style="list-style-type: none"> <li>• ceiling bracket, metal, black, loading capacity up to max. 60 kg</li> <li>• ceiling console for horizontal and inclined ceilings</li> <li>• cable mangement integrated into the tube</li> </ul>        | <ul style="list-style-type: none"> <li>• rotation and tilting system, 20° tilting</li> <li>• universal installation adapter for VESA max. 960 x 512 mm</li> <li>• recommended for SLM-series monitors of 26" (65 cm) to 42" (105 cm)</li> </ul>        |

**!** Note: Wall brackets for LCD monitors are available on the SANTEC website at [www.santec-video.com](http://www.santec-video.com)

## Quad unit



### SQV-80

The SANTEC 4-channel colour quad unit is a compact device with 4 loop-through inputs. Camera titles can consist of up to 8 characters. There are several picture display options such as full screen, sequential mode and quad mode. The SQV-80 features a 2x zoom, 4 alarm inputs and 1 alarm output. A remote control is optionally available. The delivery includes a power supply unit.

#### Product overview: Quad units

| Part no. | Video | Video inputs | Video outputs | Alarm inputs | Alarm outputs | Effective pixel  | OSD | Remote control | Voltage | Dimensions (WxHxD) mm | Weight |
|----------|-------|--------------|---------------|--------------|---------------|------------------|-----|----------------|---------|-----------------------|--------|
| SQV-80   | PAL   | 4            | 1             | 4            | 1             | 1024(H) x 625(V) | yes | optional       | 12 V DC | 215 x 45 x 200        | 2.5 kg |

#### Accessories: Quad units

| Part no. | Description   |
|----------|---|
| RC-5002  | Cable remote control with 9 m cable for controlling the SANTEC quad unit SQV-80 <ul style="list-style-type: none"> <li>• cable optionally extendible to max. 300 m</li> </ul> |
| SQV-R-1  | 19" rack adapter to install 1x SQV-80   |
| SQV-R-2  | 19" rack adapter to install 2x SQV-80   |





## SanStore - Digital video recorder



### SanStore EM and LEM DVR

The 4-channel and 8-channel SANTEC digital recorders of the SanStore EM series are good entry-level models into the world of SanStore digital recorders. These triplex-capable recorders are able to record video images in MPEG-4 format (25 fps) in D1 format or in CIF-format (100 fps). The user interface is convenient, easy-to-use and has manifold recording options. The recorders can easily be operated via the remote control. Using the network, remote data analysis is fast and easy thanks to the SanView-Lite software.

SanStore-4-LEM-500 has the same technical specifications as SanStore-4-EM-500 but has no DVD-RW drive.



### SanStore MM and HM high-end DVR

The latest SANTEC SanStore digital recorders of the MM and HM series are characterised by outstanding picture quality (D1), fast recording speed (real-time) with 25 fps on all channels and state-of-the-art MPEG-4 compression. The comprehensive configuration options and the easy-to-use menu interface are additional distinguishing marks. Features such as smart search, bookmarks or simultaneous playback and live-image make the SanStore MM and HM recorders the top products on the market. You can control the recorder either by using the buttons on the recorder or by using the mouse or the remote control. The SanView-Lite software which is included in the delivery, offers fast and easy data analysis via the network. Data can be exported using the integrated DVD writer or the USB port. The recorders can be equipped with up to 3 hard disks which allows to run a recording over a long period of time without any difficulty.





### SanStore LCM series 8/16-channel all-in-one LCD DVR

The new SANTEC SanStore 8/16-channel digital recorder with integrated 19" LCD monitor is an excellent combination of image display and recording. This elegant all-in-one device can be put up everywhere. The monitor has a high resolution, a solid front screen and good picture quality. An 8/16-channel digital recorder is built-in and is able to record video images with 25 fps in D1 format or with 100 fps in CIF format. The device works with all analogue CCTV cameras, it has a convenient user interface and manifold recording options. The device can easily be operated via a remote control. Using the network, remote data analysis is fast and easy thanks to the SanView-Lite software.

### SanStore digital recorders

| Part no.          | Description  |
|-------------------|--|
| SanStore-4LEM-500 | <p>SanStore 4-channel MPEG-4 triplex digital video recorder including 500 GB hard disk</p> <ul style="list-style-type: none"> <li>video input: 4x BNC</li> <li>compression: MPEG-4</li> <li>max. resolution: D1 (720 x 576)</li> <li>recording rate:                             <ul style="list-style-type: none"> <li>25 fps at D1 (720 x 576),</li> <li>50 fps at 2CIF (720 x 288),</li> <li>100 fps at CIF (360 x 288)</li> </ul> </li> <li>recording: permanent, schedule, motion, alarm</li> <li>PC-mouse control, IR remote control</li> <li>monitor outputs: 1x BNC, 1x VGA</li> <li>spot monitor outputs: 1x BNC</li> <li>max. number of HDD: 1x SATA</li> <li>max. storage capacity: 1 TB</li> <li>alarm inputs/outputs: 4x / 1x</li> <li>audio inputs/outputs: 1x / 1x, RCA</li> <li>communication: RS-485, RS-422</li> <li>network: 100 Mbit, RJ-45</li> <li>USB: 1x USB 1.1</li> <li>voltage: 12 V DC, 60 watt (power supply unit included)</li> <li>dimensions (WxHxD): 250 x 82 x 205 mm</li> <li>weight: 3.9 kg (without hard disk)</li> <li>SanView-Lite software</li> <li>USB memory stick for storage purposes (included in the delivery)</li> <li>USB PC-mouse to control the recorder (included in the delivery)</li> </ul>                      |
| SanStore-4EM-500  | <p>SanStore 4-channel MPEG-4 triplex digital video recorder including 500 GB hard disk</p> <ul style="list-style-type: none"> <li>video input: 4x BNC</li> <li>compression: MPEG-4</li> <li>max. resolution: D1 (720 x 576)</li> <li>recording rate:                             <ul style="list-style-type: none"> <li>25 fps at D1 (720 x 576),</li> <li>50 fps at 2CIF (720 x 288),</li> <li>100 fps at CIF (360 x 288)</li> </ul> </li> <li>recording: permanent, schedule, motion, alarm</li> <li>PC-mouse control, IR remote control</li> <li>monitor outputs: 1x BNC, 1x VGA</li> <li>spot monitor outputs: 1x BNC</li> <li>max. number of HDD: 1x SATA</li> <li>max. storage capacity: 1 TB</li> <li>DVD-RW: 1x</li> <li>alarm inputs/outputs: 4x / 1x</li> <li>audio inputs/outputs: 1x / 1x, RCA</li> <li>communication: RS-485, RS-422</li> <li>network: 100 Mbit, RJ-45</li> <li>USB: 1x USB 1.1</li> <li>voltage: 12 V DC, 60 watt (power supply unit included)</li> <li>dimensions (WxHxD): 350 x 82 x 205 mm</li> <li>weight: 3.9 kg (without hard disk)</li> <li>SanView-Lite software</li> <li>USB memory stick for storage purposes (included in the delivery)</li> <li>USB PC-mouse to control the recorder (included in the delivery)</li> </ul>  |

**SanStore digital recorder**

| Part no.          | Description  |
|-------------------|--|
| SanStore-8EM-500  | <p>SanStore 8-channel MPEG-4 triplex digital video recorder including 500 GB hard disk</p> <ul style="list-style-type: none"> <li>• video inputs: 8x BNC</li> <li>• compression: MPEG-4</li> <li>• max. resolution: D1 (720 x 576)</li> <li>• recording rate:                             <ul style="list-style-type: none"> <li>25 fps at D1 (720 x 576),</li> <li>50 fps at 2CIF (720 x 288),</li> <li>100 fps at CIF (360 x 288)</li> </ul> </li> <li>• recording: permanent, schedule, motion, alarm</li> <li>• PC-mouse control, IR remote control</li> <li>• monitor outputs: 1x BNC, 1x VGA</li> <li>• spot monitor outputs: 1x BNC</li> <li>• max. number of HDD: 1x SATA</li> <li>• max. storage capacity: 1 TB</li> <li>• DVD-RW: 1x</li> <li>• alarm inputs/outputs: 8x / 2x,</li> <li>• audio inputs/outputs: 4x / 1x, RCA</li> <li>• communication: RS-485, RS-422</li> <li>• network: 100 Mbit, RJ-45</li> <li>• USB: 1x USB 1.1</li> <li>• voltage: 12 V DC, 60 watt (power supply unit included)</li> <li>• dimensions (WxHxD): 350 x 82 x 205 mm</li> <li>• weight: 3.9 kg (without hard disk)</li> <li>• SanView-Lite software</li> <li>• USB memory stick for storage purposes (included in the delivery)</li> <li>• USB PC-mouse to control the recorder (included in the delivery)</li> </ul>    |
| SanStore-4MM-500  | <p>SanStore 4-channel MPEG-4 pentaplex digital video recorder including 500 GB hard disk</p> <ul style="list-style-type: none"> <li>• video inputs: 4x BNC</li> <li>• compression: MPEG-4</li> <li>• max. resolution: D1 (720 x 576)</li> <li>• recording rate:                             <ul style="list-style-type: none"> <li>100 fps at D1 (720 x 576)</li> </ul> </li> <li>• recording: permanent, schedule, motion, alarm</li> <li>• smart search, PC-mouse control, IR remote control</li> <li>• monitor outputs: 1x BNC, 1x VGA</li> <li>• spot monitor outputs: 2x BNC</li> <li>• loop-through outputs: 4x BNC</li> <li>• max. number of HDD: 3x SATA</li> <li>• max. storage capacity: 3 TB</li> <li>• DVD-RW: 1x</li> <li>• alarm inputs/outputs: 4x / 4x</li> <li>• audio inputs/outputs: 4x / 1x, RCA</li> <li>• communication: RS-232, RS-485, RS-422</li> <li>• network: 1 GBit, RJ-45</li> <li>• USB: 2 x USB 2.0</li> <li>• 2x e-SATA (SATA-II)</li> <li>• voltage: 230 V AC, 50 watt</li> <li>• dimensions (WxHxD): 360 x 110 x 369 mm</li> <li>• weight: 6.2 kg (without hard disk)</li> <li>• SanView-Lite software</li> <li>• USB memory stick for storage purposes (included in the delivery)</li> <li>• USB PC-mouse to control the recorder (included in the delivery)</li> </ul>   |
| SanStore-8MM-500  | <p>SanStore 8-channel MPEG-4 pentaplex digital video recorder including 500 GB hard disk</p> <ul style="list-style-type: none"> <li>• video inputs: 8x BNC</li> <li>• compression: MPEG-4</li> <li>• max. resolution: D1 (720 x 576)</li> <li>• recording rate:                             <ul style="list-style-type: none"> <li>100 fps at D1 (720 x 576)</li> <li>200 fps at 2CIF (720 x 288),</li> </ul> </li> <li>• recording: permanent, schedule, motion, alarm</li> <li>• smart search, PC-mouse control, IR remote control</li> <li>• monitor outputs: 1x BNC, 1x VGA</li> <li>• spot monitor outputs: 2x BNC</li> <li>• loop-through outputs: 8x BNC</li> <li>• max. number of HDD: 3 x SATA</li> <li>• max. storage capacity: 3 TB</li> <li>• DVD-RW: 1 x</li> <li>• alarm inputs/outputs: 8x / 4x</li> <li>• audio inputs/outputs: 8x / 1x, RCA</li> <li>• communication: RS-232, RS-485, RS-422</li> <li>• network: 1 GBit, RJ-45</li> <li>• USB: 2 x USB 2.0</li> <li>• 2x e-SATA (SATA-II)</li> <li>• voltage: 230 V AC, 50 watt</li> <li>• dimensions (WxHxD): 360 x 110 x 369 mm</li> <li>• weight 6.2 kg (without hard disk)</li> <li>• SanView-Lite software</li> <li>• USB memory stick for storage purposes (included in the delivery)</li> <li>• USB PC-mouse to control the recorder (included in the delivery)</li> </ul>                                        |
| SanStore-16MM-500 | <p>SanStore 16-channel MPEG-4 pentaplex digital video recorder including 500 GB hard disk</p> <ul style="list-style-type: none"> <li>• video inputs: 16x BNC</li> <li>• compression: MPEG-4</li> <li>• max. resolution: D1 (720 x 576)</li> <li>• recording rate:                             <ul style="list-style-type: none"> <li>100 fps at D1 (720 x 576)</li> <li>200 fps at 2CIF (720 x 288)</li> <li>400 fps at CIF (360 x 288)</li> </ul> </li> <li>• recording: permanent, schedule, motion, alarm</li> <li>• smart search, PC-mouse control, IR remote control</li> <li>• monitor outputs: 1x BNC, 1x VGA</li> <li>• spot monitor outputs: 4x BNC</li> <li>• loop-through outputs: 16x BNC</li> <li>• max. number of HDD: 3x SATA</li> <li>• max. storage capacity: 3 TB</li> <li>• DVD-RW: 1x</li> <li>• alarm inputs/outputs: 16x / 4x</li> <li>• audio inputs/outputs: 16x / 1x, RCA</li> <li>• communication: RS-232, RS-485, RS-422</li> <li>• network: 1 GBit, RJ-45</li> <li>• USB: 2 x USB 2.0</li> <li>• 2x e-SATA (SATA-II)</li> <li>• voltage: 230 V AC, 50 watt</li> <li>• dimensions (WxHxD): 360 x 110 x 369 mm</li> <li>• weight 6.2 kg (without hard disk)</li> <li>• SanView-Lite software</li> <li>• USB memory stick for storage purposes (included in the delivery)</li> <li>• USB PC-mouse to control the recorder (included in the delivery)</li> </ul>  |

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## SanStore digital recorder



| Part no.                  | Description   |
|---------------------------|---|
| <b>SanStore-8HM-1TB</b>   | <p>SanStore 8-channel MPEG-4 high-end pentaplex digital video recorder including 1 TB hard disk</p> <ul style="list-style-type: none"> <li>video inputs: 8x BNC</li> <li>compression: MPEG-4</li> <li>max. resolution: D1 (720 x 576)</li> <li>recording rate: 200 fps at D1 (720 x 576)</li> <li>recording: permanent, schedule, motion, alarm</li> <li>smart search, PC-mouse control, IR remote control</li> <li>monitor outputs: 1x BNC, 1x VGA (800 x 600 / 1024 x 768)</li> <li>spot monitor outputs: 3x BNC</li> <li>loop-through outputs: 8x BNC</li> <li>max. number of HDD: 3x SATA</li> <li>max. storage capacity: 3 TB</li> <li>DVD-RW: 1x</li> <li>alarm inputs/outputs: 8x / 4x</li> <li>audio inputs/outputs: 8x / 1x, RCA</li> <li>communication: RS-232, RS-485, RS-422</li> <li>network: 2x 1 GBit, RJ-45</li> <li>USB: 2 x USB 2.0</li> <li>2x e-SATA (SATA-II)</li> <li>voltage: 230 V AC, 50 watt</li> <li>dimensions (WxHxD): 430 x 112 x 450 mm</li> <li>weight: 8 kg (without hard disk)</li> <li>SanView-Lite software</li> <li>USB memory stick for storage purposes (included in the delivery)</li> <li>USB PC-mouse to control the recorder (included in the delivery)</li> </ul>   |
| <b>SanStore-16HM-1TB</b>  | <p>SanStore 16-channel MPEG-4 high-end pentaplex digital video recorder including 1 TB hard disk</p> <ul style="list-style-type: none"> <li>video inputs: 16x BNC</li> <li>compression: MPEG-4</li> <li>max. resolution: D1 (720 x 576)</li> <li>recording rate: 400 fps at D1 (720 x 576)</li> <li>recording: permanent, schedule, motion, alarm</li> <li>smart search, PC-mouse control, IR remote control</li> <li>monitor outputs: 1x BNC, 1x VGA (800 x 600 / 1024 x 768)</li> <li>spot monitor outputs: 3x BNC</li> <li>loop-through outputs: 16x BNC</li> <li>max. number of HDD: 3x SATA</li> <li>max. storage capacity: 3 TB</li> <li>DVD-RW: 1x</li> <li>alarm inputs/outputs: 16x / 4x</li> <li>audio inputs/outputs: 16x / 1x, RCA</li> <li>communication: RS-232, RS-485, RS-422</li> <li>network: 2x 1 GBit, RJ-45</li> <li>USB: 2 x USB 2.0</li> <li>2x e-SATA (SATA-II)</li> <li>voltage: 230 V AC, 50 watt</li> <li>dimensions (WxHxD): 430 x 112 x 450 mm</li> <li>weight: 8 kg (without hard disk)</li> <li>SanView-Lite software</li> <li>USB memory stick for storage purposes (included in the delivery)</li> <li>USB PC-mouse to control the recorder (included in the delivery)</li> </ul>  |
| <b>SanStore-8LCM-500</b>  | <p>SanStore 8-channel MPEG-4 triplex digital video recorder including 500 GB hard disk</p> <ul style="list-style-type: none"> <li>video inputs: 8x BNC</li> <li>compression: MPEG-4</li> <li>max. resolution: D1 (720 x 576)</li> <li>recording rate: 25 fps at D1 (720 x 576), 50 fps at 2CIF (720 x 288), 100 fps at CIF (360 x 288)</li> <li>recording: permanent, schedule, motion, alarm</li> <li>PC-mouse control, IR remote control</li> <li>monitor outputs: 1x BNC, spot monitor outputs: 1x BNC</li> <li>max. number of HDD: 1x SATA</li> <li>max. storage capacity: 1 TB</li> <li>alarm inputs/outputs: 8x / 2x</li> <li>audio inputs/outputs: 4x / 1x, RCA</li> <li>communication: RS-485, RS-422</li> <li>network: 100 Mbit, RJ-45</li> <li>USB: 1x USB 1.1</li> <li>monitor: 19" (48 cm) LCD display</li> <li>resolution 1280 x 1024 pixel</li> <li>brightness: 300 cd/m<sup>2</sup></li> <li>response time 8 ms</li> <li>solid protective glass</li> <li>voltage: 12 V DC, 60 watt (power supply unit included)</li> <li>dimensions (WxHxD): 510 x 360 x 70 mm (without monitor stand)</li> <li>weight: approx. 6.5 kg (without hard disk)</li> <li>SanView-Lite software</li> <li>USB memory stick for storage purposes (included in the delivery)</li> <li>USB PC-mouse to control the recorder (included in the delivery)</li> </ul>    |
| <b>SanStore-16LCM-500</b> | <p>SanStore 16-channel MPEG-4 triplex digital video recorder including 500 GB hard disk</p> <ul style="list-style-type: none"> <li>video inputs: 16x BNC</li> <li>compression: MPEG-4</li> <li>max. resolution: D1 (720 x 576)</li> <li>recording rate: 25 fps at D1 (720 x 576), 50 fps at 2CIF (720 x 288), 100 fps at CIF (360 x 288)</li> <li>recording: permanent, schedule, motion, alarm</li> <li>PC-mouse control, IR remote control</li> <li>monitor outputs: 1x BNC, spot monitor outputs: 1x BNC</li> <li>max. number of HDD: 1x SATA</li> <li>max. storage capacity: 1 TB</li> <li>alarm inputs/outputs: 16x / 2x</li> <li>audio inputs/outputs: 4x / 1x, RCA</li> <li>communication: RS-485, RS-422</li> <li>network: 100 Mbit, RJ-45</li> <li>USB: 1x USB 1.1</li> <li>monitor: 19" (48 cm) LCD display</li> <li>resolution 1280 x 1024 pixel</li> <li>brightness: 300 cd/m<sup>2</sup></li> <li>response time 8 ms</li> <li>solid protective glass</li> <li>voltage: 12 V DC, 60 watt (power supply unit included)</li> <li>dimensions (WxHxD): 510 x 360 x 70 mm (without monitor stand)</li> <li>weight: approx. 6.5 kg (without hard disk)</li> <li>SanView-Lite software</li> <li>USB memory stick for storage purposes (included in the delivery)</li> <li>USB PC-mouse to control the recorder (included in the delivery)</li> </ul> |



**Keyboard for SanStore digital recorder**

| Part no. | Description  |  |
|----------|--|--|
| KSC-3505 | <p>SANTEC keyboard with joystick; for SANTEC speed dome cameras and SanStore recorder</p> <ul style="list-style-type: none"> <li>• LCD display</li> <li>• control keys and 3-axis joystick</li> <li>• communication: RS-422, RS-485</li> <li>• Baud rate: 2400 - 230K Baud</li> <li>• communication: dome cameras max. 64 (Simplex 256)<br/>SanStore recorder max. 99<br/>slave keyboard max. 8</li> </ul> | <ul style="list-style-type: none"> <li>• junction box</li> <li>• voltage: 12 V DC, 6 watt (power supply unit included in the delivery)</li> <li>• dimensions (WxHxD): 390 x 95 x 190 mm</li> <li>• weight: 1.2 kg</li> </ul>  |

**Accessories: SanStore digital recorder**

| Part no.       | Description   |  |
|----------------|---|--|
| HDD-500S       | <p>Additional hard disk 500 GB for SanStore recorder</p> <ul style="list-style-type: none"> <li>• SATA-connection</li> <li>• 24/7 hard disk, tested</li> </ul>                                    | <ul style="list-style-type: none"> <li>• only available with first delivery</li> </ul> |
| HDD-1000S      | <p>Additional hard disk 1000 GB for SanStore recorder</p> <ul style="list-style-type: none"> <li>• SATA-connection</li> <li>• 24/7 hard disk, tested</li> </ul>                                   | <ul style="list-style-type: none"> <li>• only available with first delivery</li> </ul> |
| SanStore-19ER  | <p>19" bracket for SanStore-MM and SanStore-HM installations into 19" racks</p> <ul style="list-style-type: none"> <li>• dimensions (WxHxD) 435 x 125 x 470 mm</li> <li>• metal: black</li> </ul> |     |
| SanStore-Mouse | <p>USB mouse for SanStore digital recorder</p>  |    |

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**SANTEC IP server**





**SVS-1001**

The SANTEC 1-channel IP video server SVS-1001 is a cost-efficient solution for transmitting an analogue video signal via IP. The transmission is being made in MJPEG or MPEG4 format. The picture can be displayed in QVGA to D1 formats. SVS-1001 possesses a SD card slot for local data storage, 1 alarm input and 1 alarm output. The server has a RS-485 communication to control PTZ cameras via the network according to the Pelco D protocol. A motion detector is integrated into the SVS-1001. The video server can best be used in situations where an existing analogue camera is to be connected to a network without difficulty. The server can be used with the SanView video management software.

**SVS-1004**

The SANTEC 4-channel IP video server SVS-1004 is a cost-efficient solution for transmitting 4 video channels. The transmission is being made in MJPEG format. SVS-1004 possesses a SD card slot for local data storage and 4 alarm inputs. The server has a RS-485 communication to control PTZ cameras via the network according to the Pelco D protocol. A motion detector is integrated. The video server can best be used in situations where existing analogue cameras are to be connected to a network without difficulty. The server can be used with the SanView video management software.

**SANTEC IP server**

| Part no. | Description  |   |
|----------|--|---|
| SVS-1001 | <p>SANTEC 1-channel IP video server with local storage option on SD card</p> <ul style="list-style-type: none"> <li>• number of channels: 1</li> <li>• max. resolution: D1</li> <li>• compression: MJPEG/MPEG4</li> <li>• recording rate max. resolution per channel: 25 fps</li> <li>• motion detection, schedule</li> <li>• picture upload: FTP/e-mail/HTTP</li> <li>• alarm inputs/outputs: 1x/1x</li> <li>• RS-485 communication</li> <li>• video inputs/outputs: 1x BNC / 1x BNC</li> </ul> | <ul style="list-style-type: none"> <li>• audio inputs/outputs: 1x / 1x</li> <li>• PTZ camera controlling</li> <li>• Ethernet: 100 Mb</li> <li>• voltage: 12 V DC, 2.4 watt</li> <li>• dimensions (WxHxD): 110 x 34 x 70 mm</li> <li>• weight: 320 g</li> <li>• power supply unit and SanView-Lite software included in the delivery</li> </ul>    |
| SVS-1004 | <p>SANTEC 4-channel IP video server with local storage option on SD card</p> <ul style="list-style-type: none"> <li>• number of channels: 4</li> <li>• max. resolution: CIF</li> <li>• compression: MJPEG</li> <li>• recording rate max resolution per channel: 25 fps</li> <li>• motion detection, schedule</li> <li>• PTZ: digital</li> <li>• picture upload: FTP/e-mail/HTTP</li> <li>• alarm inputs/outputs: 4x/2x</li> <li>• RS-485 communication</li> </ul>                                | <ul style="list-style-type: none"> <li>• video inputs/outputs: 4x BNC / 1x BNC</li> <li>• audio inputs/outputs: 1x cinch / 1x cinch</li> <li>• PTZ camera controlling</li> <li>• Ethernet: 100 Mb, RJ45</li> <li>• voltage: 12 V DC, 6 watt</li> <li>• dimensions (WxHxD): 215 x 45 x 225 mm</li> <li>• weight: 1100 g</li> <li>• power supply unit and SanView-Lite software included in the delivery</li> </ul>  |



## SanView video management software

SanView is a video management software of the latest generation. The SanView software meets all requirements for image display, recording and administration of IP video sources. SanView supports all SANTEC IP products, i.e. network cameras of the SNC series, IP video server of the SVS series and digital video recorders of the SanStore series. Moreover, SanView supports Axis, Basler and IQeye IP cameras.

The SanView video management software has the following functions and features:

- live-monitoring with dual-monitor support (CMS licences)
- recording (schedule-based, in case of motions or permanently)
- administration of IP devices\*
- automatic recognition of devices in the net
- user-specific digital video matrix by flexible administration of rights/users and the creation of device groups
- event notification by picture, audio or e-mail
- export/import of configuration data
- flexibly adjustable motion detection ("no motion" detection available as extension module)
- PTZ camera controlling (including OSD menu, presets and tours)
- alarm contact controlling
- circular storage (adjustable by size or recording duration)
- pre/post-alarm recording
- domain-name support for video sources (e.g. DynDNS service)
- support of client/server technology
- multi-language user interface\*\*

\* The complete list of SanView functions and features is available on our website. Alternatively, please contact one of our representatives.

\*\* The complete list of SanView language versions is available on our website. Alternatively, please contact one of our representatives.

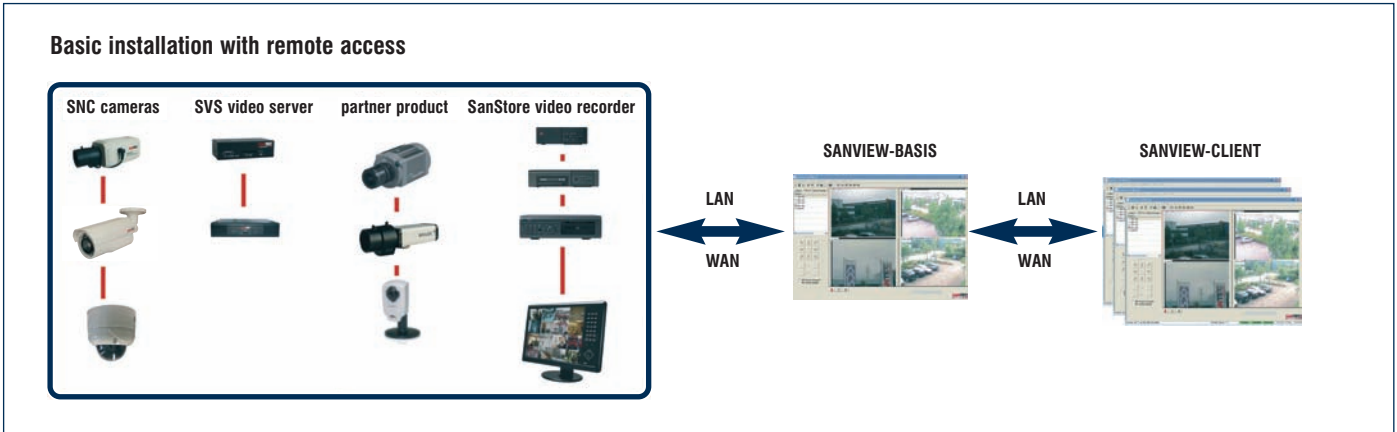




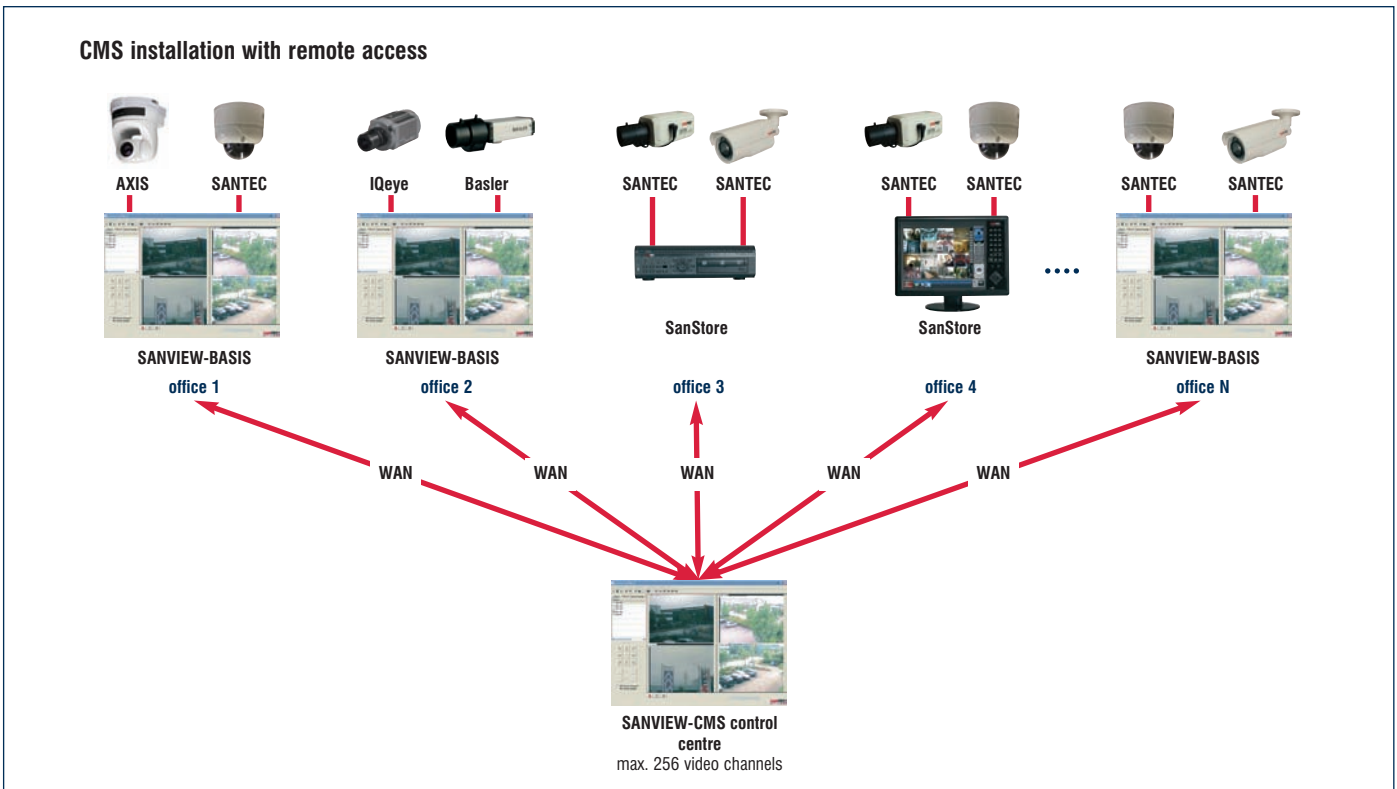
# SanView: The all-in-one platform

## SanView configuration examples

SanView-Basis-4 is the basic software, suitable to locally record images of 4 cameras. Step-by-step, the system can be expanded by 4 additional video channels using the SanView-Liz-4 licence. A maximum of 24 video channels can be recorded on a computer or a server. With the help of the SanView software, it is possible to record and display video signals from different sources, e.g. from IP cameras of SANTEC, Basler, IQeye or Axis. Furthermore, the SanView software can be used to display and playback pictures of analogue cameras which have been recorded by a SANTEC SanStore recorder. Thus the SanView software enables the creation of a hybrid system to connect an existing system of analogue cameras with IP cameras into one platform. Remote access is possible via the SanView-Client software.



Using the SanView-CMS software, several SanView single systems and SanStore digital recorders can be merged into one hybrid overall system which can remotely be controlled. Hence on one single platform, analogue as well as IP cameras can be administered at the same time. Several sites, e.g. branch offices, can be operated from one control centre. Remote access is feasible to and from several sites simultaneously. Due to the SanView software, existing systems can easily be expanded and for every site the ideal products can be used. This increases the system's functionality and provides an investment into a future-proof technology.



## SanView software licences

| Part no.                | Description  |
|-------------------------|--|
| <b>SANVIEW-BASIS-4</b>  | SanView basic software with licence for 4 video channels, max. 24 video channels possible. A SANVIEW-CLIENT licence is included in the delivery. |
| <b>SANVIEW-LIZ-4</b>    | SanView expansion licence for 4 video channels for SANVIEW-BASIS-4   |
| <b>SANVIEW-CLIENT</b>   | SanView client licence for SANVIEW-BASIS-4 for remote system access  |
| <b>SANVIEW-CMS-16</b>   | 16-channel central monitoring software to administer several SanView-Basis systems and SANTEC DVRs (SanStore and SDVR series)                    |
| <b>SANVIEW-CMS-32</b>   | 32-channel central monitoring software to administer several SanView-Basis systems and SANTEC DVRs (SanStore and SDVR series)                    |
| <b>SANVIEW-CMS-64</b>   | 64-channel central monitoring software to administer several SanView-Basis systems and SANTEC DVRs (SanStore and SDVR series)                    |
| <b>SANVIEW-CMS-128</b>  | 128-channel central monitoring software to administer several SanView-Basis systems and SANTEC DVRs (SanStore and SDVR series)                   |
| <b>SANVIEW-CMS-256</b>  | 256-channel central monitoring software to administer several SanView-Basis systems and SANTEC DVRs (SanStore and SDVR series)                   |
| <b>SANVIEW-DEMO</b>     | SanView basic demo software with all functions for 1 video channel, no expiration limit  |
| <b>SANVIEW-LITE-KAM</b> | SanView-Lite software for 4 video channels, available for SANTEC, IQeye, Basler and Axis IP cameras as well as SANTEC and Axis IP video servers  |
| <b>SANVIEW-LITE-REK</b> | SanView-Lite software for 32 video channels, available for SANTEC video recorders  |

## SanView expansion modules

| Part no.                | Description                             |
|-------------------------|---|
| <b>SANVIEW-NOMOTION</b> | Licence for event detection "no motion" |

### Supported devices\*:

**SANTEC:** SNC cameras, SVS video servers, SanStore video recorders, SDVR video recorders

**Partner products:** Basler, IQeye, AXIS

\* The complete list of compatible products is available on our website. Alternatively, please contact one of our representatives.

### Minimum system requirements:

To ensure a smooth running of the SanView software, we recommend that your system meets the following minimum requirements:

|                               |  |
|-------------------------------|--|
| Processor:                    | Intel Cor2Duo E8400                                    |
| Main memory:                  | DDR2 PC800 4GB   |
| Grafic card:                  | 512 MB memory, DirectX 9 compatible                    |
| Monitor:                      | XGA resolution (1024x768)                              |
| Network Interface Card (NIC): | 1000 Mbit/sec  |
| Hard disk storage:            | 50 MB for installation                                 |
| System software:              | Windows XP Home SP3<br>Windows Vista Home Basic 32 bit |
| DirectX:                      | Version 9.0  |

### Notes:

- Computers with AMD-processors are not suitable to run the SanView software.
- SanView is a video management software to run with applications for video surveillance systems. The computer which has the SanView software installed, should only be used for these purposes.
- The SanView software installs all required video codecs. Thus other different codecs should not be installed.
- It should be avoided - if possible - to use bridging of network cards on the computer.

### SanView demo version:

On our website you can download a demo version of the SanView basic software including all functions for one video channel (no expiration limit).

Quad unit

Digital recording systems

IP video server



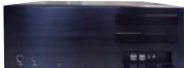

IP video management software

Transmission technology

Accessories

General

**SanView network video recorder**

| Part no.         | Description  |   |
|------------------|--|---|
| SV-NVR-S-4-500GB | <p>4-channel SanView PC-based NVR (network video recorder)</p> <ul style="list-style-type: none"> <li>• 4 IP channels</li> <li>• pre-installed SanView software</li> <li>• software licence: 1x SANVIEW-BASIS-4</li> <li>• memory: 1x 500 GB</li> <li>• network: 1 Gbit Ethernet, RJ-45</li> <li>• video output: 1x DVI</li> </ul>   | <ul style="list-style-type: none"> <li>• housing: mini-desktop</li> <li>• operating temperature: 10° - 35° C</li> <li>• humidity: 20 - 80 %</li> <li>• included in the delivery: USB keyboard, USB mouse, power cable</li> </ul>  <p>product similar to illustration</p>   |
| SV-NVR-M-8-1TB   | <p>8-channel SanView PC-based NVR</p> <ul style="list-style-type: none"> <li>• 8 IP channels (optionally expandable by SANVIEW-LIZ-4 for max. 24 channels)</li> <li>• pre-installed SanView software</li> <li>• software licences: 1x SANVIEW-BASIS-4, 1x SANVIEW-LIZ-4</li> <li>• memory: 1x 1 TB (optionally expandable to 3 TB)</li> <li>• network: 1 Gbit Ethernet, RJ-45</li> <li>• video outputs: 1x HDMI, 1x DVI, 1x VGA</li> <li>• DVD/RW drive</li> </ul> | <ul style="list-style-type: none"> <li>• voltage: 100-240 V AC</li> <li>• housing: desktop</li> <li>• dimensions (WxHxD): 430 x 170 x 430 mm</li> <li>• weight: 12.9 kg</li> <li>• voltage: 10° - 35°C</li> <li>• humidity: 20 - 80 %</li> <li>• included in the delivery: USB keyboard, USB mouse, power cable</li> </ul>  <p>product similar to illustration</p> |
| SV-NVR-M-16-1TB  | <p>16-channel SanView PC-based NVR; identical specifications as SV-NVR-M-8-1TB, except:</p> <ul style="list-style-type: none"> <li>• 16 IP channels (optionally expandable by SANVIEW-LIZ-4 for max. 24 channels)</li> </ul>   | <ul style="list-style-type: none"> <li>• software licences: 1x SANVIEW-BASIS-4, 3x SANVIEW-LIZ-4</li> </ul>    |
| SV-NVR-M-24-1TB  | <p>24-channel SanView PC-based NVR; identical specifications as SV-NVR-M-8-1TB, except:</p> <ul style="list-style-type: none"> <li>• 24 IP channels</li> <li>• software licences: 1x SANVIEW-BASIS-4, 5x SANVIEW-LIZ-4</li> </ul>  |   |

## SanGuard hybrid digital recorder systems



SanGuard digital recorder systems have comprehensive functions and have been developed according to the latest technology such as real-time MPEG4 hardware compression (RT series) on every channel, recording of mega pixel cameras and simultaneous administration of IP cameras and analogue CCTV cameras. SanGuard is impressively easy and convenient to use, it is very reliable and compatible with other SANTEC products, e.g. high-speed dome cameras or SANTEC IP cameras and servers. Due to its outstanding characteristics, SanGuard belongs to the digital recorder systems for highest demands.

### Highest performance and latest technology

- hybrid-capable (simultaneous recording of IP cameras and analogue cameras)
- quadplex mode (simultaneous monitoring, recording, playback and remote transmission)
- supports mega pixel cameras, e.g. SANTEC, Basler, IQeye or Axis cameras
- highest operational reliability by hardware watch dog and crash recovery function along with auto start in case of power leakage or interferences
- real-time recording on all channels (RT series)
- easy graphical user interface
- internal RAID system (optional)
- compatible data interface, e.g. WinGuard
- supports up to 50 different camera brands

## Comprehensive set of accessories and software modules

### SG-UP-UPD-2.2

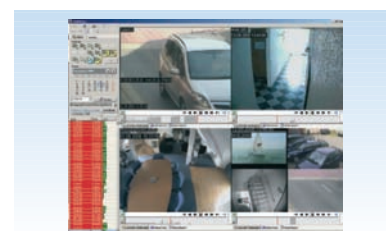
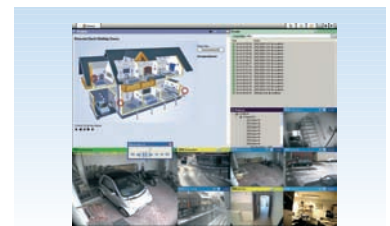
The software upgrade to version 2.2 offers a variety of new functions, e.g. support of H.264 cameras (e.g. Axis, Basler), more than 90 new camera profiles (e.g. Basler, Sanyo, Cisco), optimised remote transmission, improved interface handling, digital watermark in videos, support of IP 1 channel extensions, support of 360° ImmerVision lens and much more. Previous software versions can thus be updated using the upgrade SG-SW-UPD-2.2 (with costs).

### Remote-Client-2P software

The Remote-Client-2P software (SG-REMOTECLIENT-2P) is a site-plan based and cross-system management software. Any given number of SanGuard systems can be administered. Using the Remote-Client-2P software, a maximum of 32 SanGuard systems can be remotely be operated and administered simultaneously. Thanks to the site-plan feature, a clearly arranged view of the surroundings can be displayed. Furthermore, it is possible to interact with the cameras. With Remote-Client-2P, you can display up to 256 cameras on maximum 4 monitors at the same time. Due to the unlimited user function, it is possible to individually define the layout for each user. Dynamic hot spot function, instant replay and time-shift playback as well as integrated PTZ controlling and digital zoom function make Remote-Client-2P the perfect software inter-face for surveillance control centres or porter's offices. Using Remote-Client-2P software, it is easy to install and to administer comprehensive video surveillance systems.

### Network player

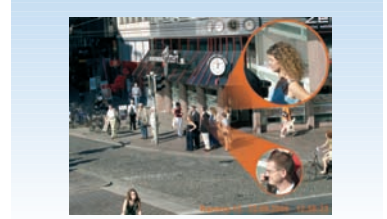
The network player (SG-Player and SG-SW-Player) enables easy access to the SanGuard systems via the network or the internet. Thus efficient recording analysis is possible from remote. You can export relevant sequences or pictures onto local storage devices, e.g. onto DVD or the hard drive of your PC or your laptop in order to preserve evidence. The network player has almost identical features as the multi player: up to 4 videos can be played at the same time, fast forward and rewind function, individual sequences are selectable, table overview can be displayed with filter functions, history chart, motion chart, motion track, motion search, snap shots function with storage and print function as well as protection of the videos against overwriting.



## Comprehensive set of accessories and software modules

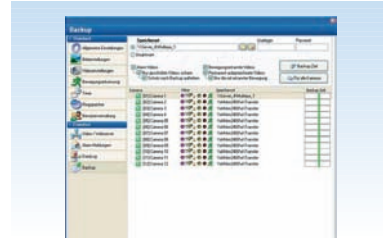
### SanGuard mega pixel licence

Using the mega pixel licence (SG-IP-HD-Lizenz), pictures from mega pixel IP cameras can be recorded with full resolution. Hence it is possible to integrate - without any difficulty - mega pixel cameras with more than 1.3 mega pixel, e.g. SANTEC, Basler, IQeye or Axis, into the SanGuard system. One SG-IP-HD-Lizenz (i.e. one licence) is required for each SanGuard recorder, independent of the number of channels.



### SanGuard auto backup module

The backup module (SG-BACKUP) enables the automatic archiving of video data onto a specific storage device. Thus defined data can be protected against deletion or overwriting. The archiving can be based on time or event, but continuous archiving is also possible. Thanks to the auto backup module, the requirements of data protection regulations can be met.



### Shell module

This is a software to protect against unwanted Windows usage. The user can be denied access to Windows, using the shell module (SG-Shell). Only SanGuard is operating. In this case, SanGuard can only be closed using the shell desktop interface. Access to the Windows interface is only possible with a password. The shell interface can be operated with add-on programs, e.g. LiveViewer or Office applications. You can adapt the design and layout of the shell desktop interface according to your needs.

### SanGuard datalog module

Datalog module (SG-DATALOG) is a universal data communication to integrate cash registers (POS), cash dispensers, scanners (barcode readers), SPS controlling and GPS receivers. Via a RS-232 port, the data is shown in the live video picture. Later, the data can be analysed by key words and can be displayed with the corresponding pictures. Using the SG-DATALOG-BOX, more than 50 different cash-systems can be connected. Using key words, automatic notifications by e-mail or SMS can be sent. The SanGuard software supports up to 32 devices per recorder.



### Desktop logger module

PC monitors can remotely be operated using the desktop logger module (SG-DESKLOG) and SanGuard systems. The monitor remote control function works on a client server basis via the network. The DTL software scans, encodes and streams the monitor pictures in full resolution via the network onto a SanGuard system. The SanGuard system shows and records monitor pictures with several fps. Desktop pictures are recorded in standard video format onto the SanGuard system. This is depending on activity, i.e. if nobody is using the PC, no data is recorded. The DTL software supports all monitor resolutions as well as dual and quad monitor operations on a PC.



### SanGuard licence plate recognition

SanGuard SG-KFZ-MODUL-2 detects, recognises and stores images of car licence plates. The system captures pictures of licence plates and analyses and compares them with database entries. Depending on your requirements, different functions can be activated, such as access rights, absence or presence notifications, alarm or ICQ notifications, e-mails, etc. Other data captured along with the licence plates, e.g. time period or frequency, are stored in a SQL database and are available for later comparisons and protocols. Recognised licence plates are sent to SanGuard in order to allow for classification, search key words or analyses - also via the Internet.



## SanGuard-Net software



The SanGuard-Net software is a sophisticated video management and recorder software for network cameras with up to 32 channels. The SanGuard-Net software possesses all functions of the SanGuard series.

Minimum system requirements:

- INTEL based mainboard
- Core 2 duo processor
- 1 GB RAM
- 1x HDD for system software and software
- 1x HDD for video data
- DVD writer
- WINDOWS 2000, XP or 2003 server
- well-ventilated housing

### Product overview: SanGuard-Net software

| Part no.      | Description   |
|---------------|---|
| SG-NET-SW-2   | 2-channel SANGUARD-NET IP video management software, extendible to 32 channels                            |
| SG-NET-SW-4   | 4-channel SANGUARD-NET IP video management software, extendible to 32 channels                            |
| SG-NET-SW-4HD | 4-channel SANGUARD-NET IP video management software, extendible to 32 channels, including SG-SW-IP-HDLIZ  |
| SG-NET-SW-8   | 8-channel SANGUARD-NET IP video management software, extendible to 32 channels, including SG-SW-IP-HDLIZ  |
| SG-NET-SW-16  | 16-channel SANGUARD-NET IP video management software, extendible to 32 channels, including SG-SW-IP-HDLIZ |
| SG-NET-SW-24  | 24-channel SANGUARD-NET IP video management software, extendible to 32 channels, including SG-SW-IP-HDLIZ |
| SG-NET-SW-32  | 32-channel SANGUARD-NET IP video management software, extendible to 32 channels, including SG-SW-IP-HDLIZ |

### Accessories: SanGuard digital recorder

| Part no.       | Description   |
|----------------|---|
| SG-SW-UP-1IP   | licence to activate 1 additional IP video input for SANGUARD-NET software   |
| SG-SW-UP-4IP   | licence to activate 4 additional IP video inputs for SANGUARD-NET software  |
| SG-SW-IP-HDLIZ | licence to use multi mega pixel IP cameras with a resolution of more than 1.3 mega pixel; server licence  |
| SG-SW-PLAYER   | multi-functional network player software and server licence to playback, save and store video sequences and individual pictures via the network; 1-4 channels.<br>Playback, integrated cachet. Suitable as individual player to playback copied videos on storage medium, server licence (1 user) |
| SG-SW-UPD-2.2  | Software upgrade to SanGuard software version 2.2   |

### SanGuard NET network recorder

SanGuard NET network recorders are able to record, playback and administer video data.

Specifications:

- administration of up to 32 IP cameras, depending on model
- recording of up to 800 mega pixel/second, depending on hardware configuration
- recording of network cameras with up to 1.3 mega pixel resolution (using SG-IP-HD-Lizenz more mega pixel are possible)
- individual adjustments of each camera
- 1 VGA monitor output
- 500 GB hard disk (optionally extendible to 3 TB)
- DVD/RW drive for data storage
- network connection (10/100/1000 Mbit)
- keyboard and mouse
- professional 19" 4 U (height) rack with lockable front panel
- including 1 SG-Player licence and 1 SG-Shell
- **BGV-Kassen certified version is additionally delivered with SG-EX-IO S6066.**



| number of channels (IP)/recording rate | up to 800 mega pixel/second | up to 800 mega pixel/second |
|--|-----------------------------|-----------------------------|
| 8-channels                             | SanGuard8-NET               | SanGuard8-NET-BGV           |
| 16-channels                            | SanGuard16-NET              | SanGuard16-NET-BGV          |
| 24-channels                            | SanGuard24-NET              | SanGuard24-NET-BGV          |
| 32-channels                            | SanGuard32-NET              | SanGuard32-NET-BGV          |



Quad unit

**SanGuard hybrid digital recorder series**

SanGuard hybrid digital recorder systems are professional digital recorders for highest demands. Due to hybrid technology, IP cameras, IP mega pixel cameras and analogue cameras can be recorded, played back and administered simultaneously. There are different types of recorders available, depending on your requirements.

Specifications:

- up to 32 analogue video inputs (BNC), depending on model (total of max. 32 channels including IP)
- 1 IP channel as test version to record network cameras with up to 1.3 mega pixel (not for 32-channel model), (extendible by SG-IP-HD-Lizenz and SG-UP-4IP)
- MJPEG compression
- individual adjustments of each camera (resolution, recording rate)
- 1 VGA monitor output, 1 BNC monitor output
- 2 audio inputs (extendible to max. 16 inputs using SG-AUDIO-16)
- 1 audio output
- 500 GB hard disk (optionally extendible to 3 TB)
- DVD/RW drive for external storage
- network connection (10/100/1000 MBit)
- keyboard and mouse
- professional 19" industry 4 U (height) rack with lockable front panel
- including 1 SG-Player Lizenz and 1 SG-Shell



Digital recording systems

IP video server

| number of video channels (BNC)/recording rate | 100 fps        |
|---|----------------|
| 8-channels                                    | SanGuard8-100  |
| 16-channels                                   | SanGuard16-100 |
| 24-channels                                   | SanGuard24-100 |
| 32-channels                                   | SanGuard32-100 |

IP video management software

**SanGuard hybrid digital recorder BGV series**

The SanGuard hybrid digital recorder systems of the BGV series are officially BGV-Kassen certified and are thus suitable for applications in banks. The BGV-Kassen certified SanGuard digital recorder has by default alarm inputs and outputs.

Specifications:

- up to 32 analogue video inputs (BNC), depending on model (total of max. 32 channels including IP), 8 alarm inputs and 2 alarm outputs
- 1 IP as test version to record network cameras up to 1.3 mega pixel (not for 32-channel model), (extendible by SG-IP-HD-Lizenz and SG-UP-4IP)
- MJPEG compression
- individual adjustments of each camera (resolution, recording rate)
- 1 VGA monitor output, 1 BNC monitor output
- 2 audio inputs (extendible to max. 16 inputs using SG-AUDIO-16)
- 1 audio output
- 500 GB hard disk (optionally extendible to 3 TB)
- DVD/RW drive for external storage
- network connection (10/100/1000 MBit)
- keyboard and mouse
- professional 19" industry 4 U (height) rack with lockable front panel
- including 1 SG-Player Lizenz, 1 SG-Shell and 1 EX-IO server



BGV-Kassen certified

Transmission technology

Accessories

| number of video channels (BNC)/recording rate | 100 fps            |
|---|--------------------|
| 8-channels                                    | SanGuard8-100-BGV  |
| 16-channels                                   | SanGuard16-100-BGV |
| 24-channels                                   | SanGuard24-100-BGV |
| 32-channels                                   | SanGuard32-100-BGV |

General

### SanGuard hybrid digital recorder real-time (RT) series

Due to a real MPEG4 hardware encoding, the SanGuard RT series is able to record video pictures of analogue cameras in real-time with highest picture quality of 720 x 576 pixel (D1). In addition, pictures of IP cameras can also be recorded thanks to hybrid technology.

**Specifications:**

- up to 32 analogue video inputs (BNC), depending on model (total of max. 32 channels including IP)
- 4 IP cameras up to 1.3 mega pixel, (extendible by SG-IP-HD-Lizenz and SG-UP-4IP)
- MPEG4 hardware compression in real-time
- individual adjustments of each camera (resolution, recording rate)
- 1 VGA monitor output, 1 BNC monitor output (per 8 analogue channels)
- up to 32 audio inputs (depending on number of video inputs)
- 1 audio output
- 500 GB hard disk (optionally extendible to 3 TB)
- DVD/RW drive for external storage
- network connection (10/100/1000 MBit)
- keyboard and mouse
- professional 19" industry 5 U (height) rack including 1 SG-Player-Lizenz and 1 SG-Shell
- **BGV-Kassen certified version also has additional 8 alarm inputs and 2 alarm outputs**



| number of channels/recording rate |                    | real-time (25 fps per channel) | real-time (25 fps per channel) |
|-----------------------------------|--------------------|--------------------------------|--------------------------------|
| <b>12-channels</b><br>(200 fps)   | 8 analogue + 4 IP  | <b>SanGuard12-RT</b>           | <b>SanGuard12-RT-BGV</b>       |
| <b>20-channels</b><br>(400 fps)   | 16 analogue + 4 IP | <b>SanGuard20-RT</b>           | <b>SanGuard20-RT-BGV</b>       |
| <b>28-channels</b><br>(600 fps)   | 24 analogue + 4 IP | <b>SanGuard28-RT</b>           | <b>SanGuard28-RT-BGV</b>       |
| <b>32-channels</b><br>(800 fps)   | 32 analogue        | <b>SanGuard32-RT</b>           | <b>SanGuard32-RT-BGV</b>       |

### SanGuard MX series

The MX series has been designed for particular requirements. The SanGuard MX recorders have up to 16 TB internal storage capacity, a RAID 5 system and optional redundant power supply. The MX series assures highest data security and protection against malfunctions. The MX models are built based on individual requirements. Please contact us for further details.

**Specifications:**

- up to 32 video inputs, depending on model
- MPEG4 hardware compression in real-time (RTMX models)
- recording rate of up to 1000 mega pixel/sec (NETMX series), depending on configuration
- individual adjustments of each camera
- audio recording on every analogue video input possible (resolution, recording rate)
- 1 SVGA monitor output
- storage capacity up to 16 TB
- hot swap capable HDDs
- RAID 5 possible
- DVD/RW drive for external storage
- network connection (10/100/1000 MBit)
- optional redundant power supply units
- keyboard and mouse
- professional 19" industry 5 U (height) rack including 1 SG-Player-Lizenz and 1 SG-Shell



| number of channels/recording rate |                                | SanGuard RTMX series   | SanGuard NETMX series   |
|-----------------------------------|--------------------------------|------------------------|-------------------------|
| <b>12-channels</b>                | 8 analogue + 4 IP (only RTMX)  | <b>SanGuard12-RTMX</b> | <b>SanGuard8-NETMX</b>  |
| <b>20-channels</b>                | 16 analogue + 4 IP (only RTMX) | <b>SanGuard20-RTMX</b> | <b>SanGuard16-NETMX</b> |
| <b>28-channels</b>                | 24 analogue + 4 IP (only RTMX) | <b>SanGuard28-RTMX</b> | <b>SanGuard24-NETMX</b> |
| <b>32-channels</b>                | 32 analogue                    | <b>SanGuard32-RTMX</b> | <b>SanGuard32-NETMX</b> |

Quad unit

Digital recording systems

IP video server

IP video management software

Transmission technology

Accessories

General

Quad unit



**Memory extension for SanGuard**

| Part no.      | Description   |
|---------------|---|
| SG-UP-500     | 500 GB hard disk extension for all SanGuard models (except MX series).<br>Only valid with first delivery.                       |
| SG-UP-1000    | 1 TB hard disk extension for all SanGuard models (except MX series).<br>Only valid with first delivery.                         |
| SG-RAID1-SHDD | Internal RAID1 for SanGuard system disk.<br>Only valid with first delivery.   |
| SG-RAID1-500  | Internal RAID1 including 500 GB memory extension for all SanGuard models (except MX series).<br>Only valid with first delivery. |
| SG-RAID1-1000 | Internal RAID1 including 1 TB memory extension for all SanGuard models (except MX series).<br>Only valid with first delivery.   |
| SG-RAID-8TB   | RAID controller including 8 TB memory extension for SanGuard models of MX series.   |
| SG-RAID-10TB  | RAID controller including 10 TB memory extension for SanGuard models of MX series.  |
| SG-RAID-12TB  | RAID controller including 12 TB memory extension for SanGuard models of MX series.  |
| SG-RAID-16TB  | RAID controller including 16 TB memory extension for SanGuard models of MX series.  |

Digital recording systems

IP video server

**Accessories: SanGuard digital recorder**




| Part no.           | Description   |
|--------------------|---|
| SG-UP-1IP          | Licence to activate 1 additional IP camera input for SanGuard digital recorder.   |
| SG-UP-4IP          | Licence to activate 4 additional IP camera inputs for SanGuard digital recorder.  |
| SG-IP-HD-Lizenz    | Licence to activate mega pixel IP cameras with a resolution of more than 1.4 mega pixel <ul style="list-style-type: none"> <li>• 1 server licence</li> </ul>  |
| SG-PLAYER          | Multi-functional network player software to playback, save and store video sequences and individual pictures via the network <ul style="list-style-type: none"> <li>• can also be used as backup player</li> <li>• 1 server licence (1 user)</li> </ul>   |
| SG-UP-IO           | Extension of 8 opto-decoupled alarm inputs and 2 relay switching outputs. <ul style="list-style-type: none"> <li>• For SanGuard16, max. 2 SG-UP-IO are possible.</li> <li>• For SanGuard32, max. 4 SG-UP-IO are possible.</li> </ul>  |
| SG-AUDIO-16        | Extension to 16 audio channels (only for SanGuard series).  |
| SG-BACKUP          | Auto backup licence <ul style="list-style-type: none"> <li>• for automatic copying of timer-based or alarm-based videos onto internal or external storage medium or drive</li> <li>• network-capable</li> </ul>    |
| SG-RemoteClient-2P | Client management software to administer one or several (max. 10) SanGuard systems; 1 user licence. <ul style="list-style-type: none"> <li>• live-viewing of video cameras</li> <li>• display of selected cameras on a spot monitor</li> <li>• viewing of recorded videos</li> <li>• PTZ camera controlling</li> <li>• operating of external systems via IO modules</li> <li>• analysis of event protocols</li> <li>• display of HTML pages</li> <li>• creation of site-plans</li> <li>• working with object site-plans</li> <li>• access and display intranet or internet information</li> <li>• requirements: software 2.2</li> </ul>  |
| SG-RC2P-PC-2       | Remote-Client-2P inquiry station with 2x DVI outputs consisting of a 19" PC with dual DVI output and installed Remote-Client-2P software.   |
| SG-RC2P-PC-4       | Remote-Client-2P inquiry station with 4x DVI outputs consisting of a 19" PC with quad DVI output and installed Remote-Client-2P software.   |

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## Accessories: SanGuard digital recorder

| Part no.          | Description   |
|-------------------|---|
| SG-DATALOG        | DataLog module; universal data acquisition via RS-232/TCP/IP to display data/transactions into the live-picture and/or into the recording including DataLog database for full-text search. Key word alarms and comprehensive filter functions can be configured. Typical data sources are cash register systems (POS), cash dispensers, access control systems, scanners, GPS receivers, NPR systems, etc. The delivery includes standard profiles, e.g. for PC cash, barcode reader, GPS receiver and one DataLog licence to activate a data device. Customer-specific or device-specific DataLog profiles are calculated based on time expenditure.  |
| SG-Datalog-Lizenz | Additional licence to activate DataLog profiles which already exist or created new.   |
| SG-DATALOG-BOX    | Protocol converter box type NPC for SanGuard software and recorder for cash register data or transactional data of more than 50 different cashier systems (POS), cash dispensers and access control systems, e.g. HUTH, Scheidt+Bachmann, IBM/Diebold, WincorNixdorf, NCR. Serial data input (RS 232) or Ethernet RJ45 (protocol-dependent).<br>A DataLog licence (SG-Datalog-Lizenz) is included in the delivery.  |
| SG-KFZ-MODUL-2    | Licence plate recognition module: 2-channels, software module for SanGuard recorder to recognise and analyse licence plates. Including search function, event notification and/or switch contact via optionally available SG-EX-IO S6066 server or SG-UP-IO board. Including DataLog module and licence.  |
| SG-MIKRO          | Miniature condenser microphone with integrated pre-amplifier <ul style="list-style-type: none"> <li>high sensitivity</li> <li>connection: 12 V DC</li> </ul>   |
| SG-19BNC          | 16x BNC connection for SanGuard recorder <ul style="list-style-type: none"> <li>height: 1 U</li> <li>closed design made of steel plate</li> <li>colour: black</li> <li>delivery includes 2 recorder connection cables of 1 m length</li> <li>not suitable for SanGuard RT series</li> </ul>    |
| SG-DESKLOG        | DesktopLogger module to encode, record and transmit; remote monitoring and remote recording of desktops via SanGuard-Net <ul style="list-style-type: none"> <li>delivery includes: DTL encoder software, licence to activate a desktop stream, instructions</li> </ul>  |
| SG-SHELL          | Software for exclusive SanGuard or SanGuard-NET operation without access to the standard Windows functions <ul style="list-style-type: none"> <li>Windows is not active and only accessible using a specific password</li> </ul>  |
| SG-EX-IO S6066    | IO server to switch inputs and outputs via the network <ul style="list-style-type: none"> <li>integrated Ethernet port; S6066 has 6 opto-isolated digital inputs and 6 relay outputs</li> <li>suitable for 250V AC / 5A and 30V DC / 5A</li> <li>S6066 is delivered with activation licence and is suitable to operate SanGuard and SanGuard-NET recorders</li> </ul>   |
| SG-EX-IO-S-LIZ    | Software licence to activate external devices of series S6060 and S6066   |
| SG-JOYSTICK       | 3-axis USB joystick, 12 functions (2 of them included in the handle), spring reset in mid-position, ergonomic housing. Using the 12 joystick buttons (positioned in the housing and in the handle) it is possible to programme comprehensive functions for SanGuard.  |
| SG-USB-RS485      | External converter USB/RS-485, to control high-speed domes  |
| SG-2DVI           | Extension for 2-channel monitor output for all SanGuard models (except BGV-Kassen models).<br>Only valid with first delivery.   |
| SG-REDNT          | Redundant power supply unit for all SanGuard models.<br>Only valid with first delivery.   |
| SG-3GARANTIE      | Warranty extension for all SanGuard models for 3 years including HDD.<br>Only valid with first delivery.  |








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**Twisted pair & coax transmission active**


| Part no.  | Description  |  |
|-----------|--|--|
| VSZ-1000  | SANTEC miniature twisted pair transmitter for direct connection with video source <ul style="list-style-type: none"> <li>transmission range max. 1,000 m (depending on cable type) if receiver VEZ-1000 is being used</li> <li>transmission range max. 1,500 m (depending on cable type) if receiver VEZ-4K or VEZ-8K is being used</li> </ul>   | <ul style="list-style-type: none"> <li>video input: BNC 1Vpp at 75 Ohm</li> <li>twisted pair output: 120 Ohm screw clamp</li> <li>voltage: 12 V DC, 0.3 watt</li> <li>operating temperature: -10° C to +60° C</li> <li>dimensions: (DxL) 18 x 47 mm</li> <li>weight: approx. 30 g</li> </ul>  |
| VEZ-1000  | SANTEC miniature twisted pair receiver for direct connection with BNC plug output <ul style="list-style-type: none"> <li>transmission range max. 1,000 m (depending on cable type)</li> <li>video output: BNC 1Vpp at 75 Ohm</li> <li>twisted pair input: 100-200 Ohm screw clamp</li> <li>adjustment range: 0-30 dB at 50Hz - 100 Hz</li> </ul> | <ul style="list-style-type: none"> <li>voltage: 12 V DC, 0.3 watt</li> <li>operating temperature: -10° C bis +60° C</li> <li>dimensions: (DxL) 18 x 47 mm</li> <li>weight: approx. 40 g</li> </ul>    |
| VSZ-AK230 | SANTEC twisted pair transmitter <ul style="list-style-type: none"> <li>transmission range max. 1,600 m (depending on cable type)</li> </ul>  | <ul style="list-style-type: none"> <li>weather-proof housing IP-65</li> <li>voltage: 230 V AC</li> </ul>    |
| VSZ-4K    | SANTEC 4-channel twisted pair transmitter in compact housing <ul style="list-style-type: none"> <li>transmission range max. 1,500 m (depending on cable type)</li> <li>easy adjustments</li> </ul>   | <ul style="list-style-type: none"> <li>adjustments are possible from the outside</li> <li>voltage: 110-240 V AC</li> <li>dimensions (WxHxD): 216 x 44 x 240 mm</li> </ul>   |
| VEZ-4K    | SANTEC 4-channel twisted pair receiver in compact housing <ul style="list-style-type: none"> <li>transmission range max. 1,500 m (depending on cable type)</li> <li>easy adjustments</li> </ul>  | <ul style="list-style-type: none"> <li>adjustments are possible from the outside</li> <li>voltage: 110-240 V AC</li> <li>dimensions (WxHxD): 216 x 44 x 240 mm</li> </ul>   |
| VSZ-8K    | SANTEC 8-channel twisted pair transmitter in compact housing <ul style="list-style-type: none"> <li>transmission range max. 1,500 m (depending on cable type)</li> <li>easy adjustments</li> </ul>   | <ul style="list-style-type: none"> <li>adjustments are possible from the outside</li> <li>voltage: 110-240 V AC</li> <li>dimensions (WxHxD): 216 x 44 x 240 mm</li> </ul>    |
| VEZ-8K    | SANTEC 8-channel twisted pair receiver in compact housing <ul style="list-style-type: none"> <li>transmission range max. 1,500 m (depending on cable type)</li> <li>easy adjustments</li> </ul>  | <ul style="list-style-type: none"> <li>adjustments are possible from the outside</li> <li>voltage: 110-240 V AC</li> <li>dimensions (WxHxD): 216 x 44 x 240 mm</li> </ul>   |

**!** Notice: Recommended cable type: CAT5 or higher

**Twisted pair transmission passive**

| Part no. | Description   |   |
|----------|---|---|
| M-500    | Compact balun to transmit a video signal via a twisted pair cable; can be used as transmitter or receiver <ul style="list-style-type: none"> <li>range: max. 750 m with CAT5-cable and b/w video signal; max 500 m at colour signal when analogue end devices are used</li> </ul> | <ul style="list-style-type: none"> <li>connections: 1x BNC, 1x RJ-45</li> </ul>        |
| M-500-10 | 10 pieces of M-500 in a covering box  |   |
| M-509    | Compact balun to transmit a video signal via a twisted pair cable; can be used as transmitter or receiver <ul style="list-style-type: none"> <li>range: max. 750 m with CAT5-cable and b/w video signal; max 500 m at colour signal when analogue end devices are used</li> </ul> | <ul style="list-style-type: none"> <li>connections: 1x BNC, 1x screw clamp</li> </ul>  |
| M-509-10 | 10 pieces of M-509 in a covering box  |   |








**Single-cable transmission**

| Part no.    | Description   |  |
|-------------|---|--|
| VKS-2100S/V | Single-cable coax transmitter and receiver <ul style="list-style-type: none"> <li>transmits video and audio signals as well as power supply (12 V DC, 0.5 A) via the existing coax cable to the camera</li> </ul> | <ul style="list-style-type: none"> <li>(only valid for 12 V cameras )</li> <li>power supply unit included in the delivery</li> </ul>  |

Accessories

General

**Distributor/Amplifier**

| Part no. | Description  |  |   |
|----------|--|--|---|
| VEV-101  | Video equaliser/amplifier <ul style="list-style-type: none"> <li>1 input - 1 output</li> <li>adjustable signal amplification</li> </ul>  | <ul style="list-style-type: none"> <li>BNC input/output</li> <li>voltage: 230 V AC</li> </ul>                              |    |
| WS-104   | Video distributor/amplifier <ul style="list-style-type: none"> <li>1 input - 4 outputs</li> <li>adjustable signal amplification</li> </ul>   | <ul style="list-style-type: none"> <li>BNC input/output</li> <li>voltage: 230 V AC</li> </ul>                              |    |
| WS-204   | Video distributor/amplifier <ul style="list-style-type: none"> <li>1 input - 8 outputs or 2 inputs - 2x4 outputs</li> <li>adjustable signal amplification</li> </ul>   | <ul style="list-style-type: none"> <li>BNC input/output</li> <li>voltage: 230 V AC</li> </ul>                              |    |
| WS-816   | Video distributor/amplifier <ul style="list-style-type: none"> <li>2 (4, 8) inputs - 2x8 (4x4, 8x2) outputs</li> <li>adjustable signal amplification</li> <li>BNC inputs/outputs</li> </ul>                              | <ul style="list-style-type: none"> <li>including 19" mounting</li> <li>voltage: 230 V AC</li> </ul>                        |    |
| WS-1632  | Video distributor/amplifier <ul style="list-style-type: none"> <li>4 (8, 16) inputs - 4x8 (8x4, 16x2) outputs</li> <li>BNC inputs/outputs</li> <li>including 19" mounting</li> <li>voltage: 230 V AC</li> </ul>          | <ul style="list-style-type: none"> <li>dimensions (WxHxD): 432 x 44 x 240 mm</li> <li>weight: 3.5 kg</li> </ul>            |    |
| WS-3264  | Video distributor/amplifier <ul style="list-style-type: none"> <li>8 (16, 32) inputs - 8x8 (16x4, 32x2) outputs</li> <li>BNC inputs/outputs</li> <li>including 19" mounting</li> <li>voltage: 230 V AC</li> </ul>        | <ul style="list-style-type: none"> <li>dimensions (WxHxD): 432 x 88 x 352 mm</li> <li>weight: 5.2 kg</li> </ul>            |    |
| VPT-80   | Passive ground loop isolation transformer <ul style="list-style-type: none"> <li>coax input/output (BNC) 75 Ohm</li> <li>to loop-in into a video coax cable</li> <li>integrated balun to reduce interferences</li> </ul> | <ul style="list-style-type: none"> <li>integrated surge protection</li> <li>band width 20 Hz - 11 MHz, +0/-3 dB</li> </ul> |  |

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| Tools                |   |   |
|----------------------|---|---|
| Part no.             | Description   |   |
| LT-Test              | Cable tester for RJ-45, STP and BNC cabling <ul style="list-style-type: none"> <li>test types: function/cable pairing</li> <li>including adapter for remote control</li> </ul>  |    |
| ND-3-Graufilter      | Filter to balance automatically controlled lenses<br>55 mm filter thread  |    |
| IR-Sperfilter        | Filter to absorb interfering IR light<br>55 mm filter thread  |    |
| LCD-P56              | Test monitor 5.6" (14 cm) <ul style="list-style-type: none"> <li>5.6" (14 cm) LCD colour display</li> <li>NTSC/PAL</li> <li>resolution: 320 (H) x 234 (V), picture format 4:3</li> <li>2 video inputs: cinch-BNC</li> <li>1 video output: cinch-BNC</li> <li>1 audio input</li> <li>voltage: 12 V DC</li> <li>12 V rechargeable battery included in the delivery</li> <li>operating temperature: -10° to +60° C</li> <li>dimensions (WxHxD) 180 x 120 x 34 mm</li> <li>carrying bag included in the delivery</li> </ul>   |    |
| LCD-P56TG            | Test monitor 5.6" (14 cm) with built-in test picture generator <ul style="list-style-type: none"> <li>5.6" (14 cm) LCD colour display</li> <li>NTSC/PAL</li> <li>resolution: 320 (H) x 234 (V), picture format 4:3</li> <li>2 video inputs: cinch-BNC</li> <li>1 video output: cinch-BNC</li> <li>1 audio input</li> <li>built-in test picture generator</li> <li>voltage: 12 V DC</li> <li>12 V rechargeable battery included in the delivery</li> <li>operating temperature: -10° to +60° C</li> <li>dimensions (WxHxD) 180 x 120 x 34 mm</li> <li>carrying bag included in the delivery</li> </ul> |    |
| Brennweitenermittler | SANTEC disk to termine the focal length of lenses   |   |
| SANTEC POSTER        | SANTEC poster; size A0 <ul style="list-style-type: none"> <li>dimensions (WxH) 841 x 1189 mm</li> </ul>   |  |

**Plugs and cables**

| Part no.          | Description   |   |
|-------------------|---|---|
| BNC-C-TG/10       | Professional BNC crimp plug for video cable (only for coax-0.6/100)<br><ul style="list-style-type: none"> <li>packaging unit: 10 pieces</li> </ul>  |    |
| BNC-CK-TG/10      | Professional BNC crimp plug for video cable (coax-0.6/100)<br><ul style="list-style-type: none"> <li>including bend protection</li> <li>packaging unit: 10 pieces</li> </ul>  |    |
| BNC-CM-TG/10      | Professional BNC crimp plug for coax multi-cable<br><ul style="list-style-type: none"> <li>including bend protection</li> <li>packaging unit: 10 pieces</li> </ul>  |    |
| BNC-T-TG/5        | Professional BNC tee-connector<br><ul style="list-style-type: none"> <li>packaging unit: 5 pieces</li> </ul>  |    |
| BNC-V-TG/10       | Professional BNC connection of two BNC plugs<br><ul style="list-style-type: none"> <li>packaging unit: 10 pieces</li> </ul>   |    |
| BNC-W-TG/5        | Professional BNC angle plug, pivotable<br><ul style="list-style-type: none"> <li>packaging unit: 5 pieces</li> </ul>  |    |
| CIN-BNC-TG/10     | Professional adapter cinch connector / BNC plugs<br><ul style="list-style-type: none"> <li>packaging unit: 10 pieces</li> </ul>   |    |
| BNC-CIN-TG/10     | Professional adapter BNC connector / cinch plugs<br><ul style="list-style-type: none"> <li>packaging unit: 10 pieces</li> </ul>   |    |
| BNC-A75-TG/10     | Professional BNC terminating resistor 75 Ohm<br><ul style="list-style-type: none"> <li>packaging unit: 10 pieces</li> </ul>   |   |
| RJ-45-STXTG       | Industry RJ-45 field plug<br><ul style="list-style-type: none"> <li>IP-20 Cat 6</li> <li>for AWG22-26 cable</li> <li>colour coding black</li> <li>field convertible</li> <li>no special tools necessary</li> </ul>  |  |
| NWK-100           | Network cable<br><ul style="list-style-type: none"> <li>S-STP 4x2xAWG23/1 (FRNC copper, blank)</li> <li>100 m ring</li> <li>diameter of inner conductor: 0.56 mm</li> <li>10/100/1000 Mbit</li> </ul>   |  |
| KOAX-MULTI-59/100 | Black multi-cable for video and power supply transmission<br><ul style="list-style-type: none"> <li>1 x 75 Ohm (RG-59) and 4 single leads 0.5 mm</li> <li>100 m ring</li> </ul>   |  |
| KOAX-MULTI-59/250 | Black multi-cable for video and power supply transmission<br><ul style="list-style-type: none"> <li>1x 75 Ohm (RG-59) and 4 single leads 0.5 mm</li> <li>250 m cable drum</li> </ul>  |  |
| KOAX-0.6/100      | Coax cable 0.6 / 3.7, 75 Ohm<br><ul style="list-style-type: none"> <li>video cable for indoor usage</li> <li>100 m ring</li> </ul>  |  |
| KOAX-MULTI/100    | Coax multi-cable with shielded video line<br><ul style="list-style-type: none"> <li>1x shielded video line</li> <li>4x single leads</li> <li>for combined transmission of 1x video signal, power supply and switch contact on a</li> <li>cable length of max. 25 m</li> <li>100 m ring</li> <li>appropriate video plug: BNC-CM-TG/10</li> </ul> |  |
| KOAX-BNC-0.5/10   | Pre-assembled coax cable 0.5 m with BNC plugs already mounted at both ends<br><ul style="list-style-type: none"> <li>cable length: 0.5 m</li> <li>packaging unit: 10 pieces</li> </ul>  |  |
| KOAX-BNC-1.0/10   | Pre-assembled coax cable 1 m with BNC plugs already mounted at both ends<br><ul style="list-style-type: none"> <li>cable length 1 m</li> <li>packaging unit: 10 pieces</li> </ul>   |  |
| KOAX-BNC-2.0/10   | Pre-assembled coax cable 2 m with BNC plugs already mounted at both ends<br><ul style="list-style-type: none"> <li>cable length 2 m</li> <li>packaging unit: 10 pieces</li> </ul>   |  |

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## Power supply units

| Part no.      | Description  |  |
|---------------|--|--|
| VCA-12V-0.6A  | SANTEC stabilized power supply unit, connection cable with open cable ends <ul style="list-style-type: none"> <li>input voltage: 230 V AC</li> <li>output voltage: 12 V DC max. 0.6 A</li> </ul>   | <ul style="list-style-type: none"> <li>dimensions (WxHxD): 32 x 40 x 74 mm</li> </ul>   |
| VCA-12V-0.6AS | SANTEC stabilized power supply unit, pre-assembled with plug <ul style="list-style-type: none"> <li>input voltage: 230 V AC</li> <li>output voltage: 12 V DC max. 0.6 A</li> </ul>   | <ul style="list-style-type: none"> <li>dimensions (WxHxD): 32 x 40 x 74 mm</li> </ul>   |
| VCA-12V-0.8A  | SANTEC stabilized power supply unit, desktop version, with cable connection at both ends <ul style="list-style-type: none"> <li>input voltage: 230 V AC</li> <li>output voltage: 12 V DC max. 0.8 A</li> </ul>   | <ul style="list-style-type: none"> <li>dimensions (WxHxD): 74 x 74 x 74 mm</li> </ul>   |
| VCA-12V-1.3A  | SANTEC stabilized power supply unit, connection cable with open cable ends <ul style="list-style-type: none"> <li>input voltage: 230 V AC</li> <li>output voltage: 12 V DC max. 1.3 A</li> </ul>   | <ul style="list-style-type: none"> <li>dimensions (WxHxD): 48 x 33 x 75 mm</li> </ul>   |
| VCA-12V-1.3AS | SANTEC stabilized power supply unit, pre-assembled with plug <ul style="list-style-type: none"> <li>input voltage: 230 V AC</li> <li>output voltage: 12 V DC max. 1.3 A</li> </ul>   | <ul style="list-style-type: none"> <li>dimensions (WxHxD): 48 x 33 x 75 mm</li> </ul>   |
| VCA-12V-2A/A  | SANTEC power supply unit specially for outdoor installations; for dome cameras VDC-610ID/W and SNC-670ID/W <ul style="list-style-type: none"> <li>weather-proof housing (IP-66)</li> <li>especially for outdoor installations</li> <li>input voltage: 230 V AC</li> </ul>                                    | <ul style="list-style-type: none"> <li>output voltage: 12 V DC max. 2.0 A</li> <li>dimensions (WxHxD): 110 x 180 x 90 mm</li> </ul>                         |
| VCA-12V-2.5AS | SANTEC stabilized power supply unit, desktop version, with cable connection at both ends <ul style="list-style-type: none"> <li>input voltage: 230 V AC</li> <li>output voltage: 12 V DC max. 2.5 A</li> </ul>   | <ul style="list-style-type: none"> <li>dimensions (WxHxD): 45 x 30 x 120 mm</li> </ul>   |
| VCA-12V-5A    | SANTEC stabilized power supply unit, desktop version <ul style="list-style-type: none"> <li>input voltage: 230 V AC</li> <li>output voltage: 12 - 14 V DC max. 5 A</li> </ul>  | <ul style="list-style-type: none"> <li>dimensions (WxHxD): 85 x 50 x 130 mm</li> </ul>    |
| VCA-24VAC     | SANTEC AC voltage power supply unit <ul style="list-style-type: none"> <li>input voltage: 230 V AC</li> <li>output voltage: 24 V AC max. 0.4 A</li> </ul>  | <ul style="list-style-type: none"> <li>dimensions (WxHxD): 50 x 80 x 70</li> </ul>    |
| VCA-12V-5AS-M | SANTEC stabilized power supply unit, desktop version <ul style="list-style-type: none"> <li>replacement power supply unit for SANTEC LCD monitors</li> <li>input voltage: 230 V AC</li> </ul>  | <ul style="list-style-type: none"> <li>output voltage: 12 V DC max. 5 A</li> <li>dimensions (WxHxD): 65 x 40 x 120 mm</li> </ul>                          |
| SDD-PS        | Power supply unit and connection distributor for usage with system cable SDD-VK-10 and SDD-VK-30 <ul style="list-style-type: none"> <li>12 V DC / 5 A</li> </ul>   | <ul style="list-style-type: none"> <li>connection distributor 1 to 4 for power supply</li> </ul>    |
| VCA-200       | SANTEC AC voltage power supply unit for indoor installation; for SANTEC dome cameras (not suitable for VDC-610ID/W and SNC-670ID/W) <ul style="list-style-type: none"> <li>input voltage: 230 V AC</li> <li>output voltage: 24 V AC max. 2.1 A</li> </ul>  | <ul style="list-style-type: none"> <li>dimensions (WxHxD): 100 x 65 x 135 mm</li> <li>cable connection at both ends</li> </ul>                            |
| VCA-500       | SANTEC AC power supply unit for indoor installations; for SANTEC dome cameras (not applicable for VDC-610ID/W and SNC-670ID/W) <ul style="list-style-type: none"> <li>to supply heater/fan of dome housing at outdoor installation</li> <li>input voltage: 230 V AC</li> </ul>                               | <ul style="list-style-type: none"> <li>output voltage: 24 V AC max. 5 A</li> <li>dimensions (WxHxD): 110 x 65 x 170 mm</li> </ul>                         |
| VCA-600/A     | SANTEC power supply unit specially for SANTEC dome cameras at outdoor installation (not applicable for VDC-610ID/W and SNC-670ID/W) <ul style="list-style-type: none"> <li>input voltage: 230 V AC</li> <li>output voltage: 24 V AC max. 5 A</li> <li>weather-proof housing (IP-66)</li> </ul>               | <ul style="list-style-type: none"> <li>to supply heater/fan of outdoor dome housings</li> <li>dimensions (WxHxD): 110 x 180 x 90 mm</li> </ul>            |
| VCA-12V-SA9-i | SANTEC multiple power supply unit to connect up to 9 cameras, e.g. via coax multi-cable <ul style="list-style-type: none"> <li>input voltage: 230 V AC</li> <li>output voltage: 12 V DC mit max. 4 A</li> <li>connection clamps for 9 power outputs</li> <li>connection clamps for 9 video inputs</li> </ul> | <ul style="list-style-type: none"> <li>video output: 9 x BNC connector</li> <li>dimensions (WxHxD): 430 x 45 x 130 mm</li> <li>weight: 2.2 kg</li> </ul>  |



## Comprehensive SANTEC website

On the SANTEC website, you will quickly find the latest information on products and related product news. Moreover, SANTEC company information along with a list of SANTEC distributor partners in Europe is available. There is a range of download options, e.g. brochures, data sheets and much more.

So don't wait and visit the SANTEC website now at: [www.santec-video.com](http://www.santec-video.com)

### Product information - available any time

In the product section of the website, SANTEC products are grouped by category so that you will only need a few clicks to get the information you need - product descriptions, data sheets, high-resolution pictures, data sheets and much more.

