

















MCG/Datel Technologic Services &Trading Co. Ltd., which is part of MCG Group, is a Turkish company that specializes in management of high volume, complex turnkey projects in communication. With the vision of "#1 WireLess Network Solutions", Datel's expertise extends on a wide range of communication areas. technologies and implementation management capabilities.

MCG Group is comprising of five companies that specialize in communications technologies.

MCG Group provides a variety of advanced communication solutions (including projects and services, products and development and network operation) for corporate customers and institutions.



MCG/Datel Ltd. provides a variety of products and solutions for complex communication turnkey projects. Datel combines and integrates products, technologies, communication protocols and experience. Starting from 1992, Datel has a well known name in Turkish market.

MCG/Datel Ltd. is able to offer each customer unique solution to meet sophisticated project requirements and standards.

MCG/DATEL LTD. AREAS OF EXPERTISE

Wireless Networks

- Microwave links PDH, SDH
- Optical Links via Laser -FSO
- Cellular systems Analog and Digital
- WLL, LMDS, VSAT. systems in different technologies and interfaces
- Radio Base Stations and

LAN & WAN

- Fiber to Desk
- Control Systems
- Data networks
- Fiber-optic cables (SDH Rings)

T Solutions

- Internet & Intranet
- VOIP
- Network Security
- Video over IP & Wireless







MCG/Datel Ltd. can combine and integrate products, technologies and protocols, so that the end system provides the most cost-effective solution that meets the customers' requirements. And most importantly with the help of our professional project management team and techniques, on time.

A skilled professional project manager is allocated to each project. Each stage of the project is managed, supervised and implemented without any compromise on quality, while adhering to the project's schedule.





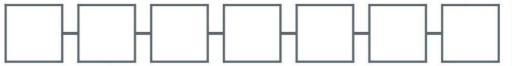














DATEL Ltd. provides smooth and faultless project implementation, from the early stages to full system operation. These activities include:

- Requirements Identification
- Sites Survey
- Specifications generation
- Design and Engineering
- Purchasing and supply of equipment, ancillaries and installation materials like Shelters, Towers, RF Connectors and Accessories, etc.
- Logistic activities including: shipments, customs clearance, storage and transportation to destination sites.
- Civil works: construction. electricity, air conditioning, antennas' towers, etc.
- Operation and marketing aspects
- Infrastructure for Value Added Services
- Installation
- Performing systems acceptance tests (ATP), and hand over to customers
- Site documentation (As Built)
- Training
- Maintenance and technical support

All above tasks are performed in the shortest and most efficient schedule feasible.

Datel's philosophy is based on sharing information with its customers on a timely basis. As an important key in achieving the project targets and goals, Datel projects managers use a reporting and update management tools to convey to its customers details about the projects progress. Any shortcomings, its implications and recommended solutions are reported to the customers in near-real time.

The following tools and practices are routinely used:

- Joined management reviews with the appropriate levels of participation.
- · Presentation of progress reports on set time periods - weekly, monthly, and quarterly.
- Joined site inspections, on an as required basis, or at project milestones.

MCG/ Datel is ISO 9001:2000 and TSE (Turkish Standard Institute) certified and employs international standards as part of our commitment to quality performance.



WIRELESS NETWORK SOLUTIONS

- SDH/PDH GSM Repeaters
- **GSM Infrastructure RF Products**
- Telcom Towers &Shelters
- Turn-key Solutions
- Outdoor RF WAN/LAN **Applications**
- Indoor RF LAN Applications
- Outdoor Laser WAN/LAN **Applications**



MCG/DATEL SOLUTIONS

FIBER TO DESK APPLICATIONS

- End to end Fiber Optic Cabling Applications
- Fiber Optic Access -PON Solutions
- · Classical Fiber Optic Networks
- Fiber Optic Solutions/ Conversions and Scada Project Infrastructure
- · Gigabit Ethernet & Fiber Backbone
- Cat. 5. Cat. 6 .etc. Structured **Cabling Solutions**

WIDE AREA NETWORK (WAN) SOLUTIONS

- VoIP & IP Telephony (Voice / Data/ Video over IP Networks)
- Video Conferencing and Video Streaming
- Frame Relay
- Cable TV over IΡ























MCG / Datel provides a wide range of GSM shelters for complex telecommunication turn-key projects. Datel shelters can be avaible for almost any type of telecommunication equipment, and usable in any part of the world within any air condition. Couse of their lightweight designs and modular constructions, they are ideal for use on rooftops and also ground level applications. They have effective costs and speed installation capabilities for cellular base station foundations.

Datel shelters have been designed and manufactured in various or custom sizes according to customer requirements and specifications. For easy transportation all shelter equipments are delivered flat-packed. Packs includes main components and an assembly kit for local installations. Datel Shelter's dimensions and specifications depends on the type of equipment needs, climate and the accessories.

DATEL SHELTERS

lightweight structures

rigid & stable

long term durability

well isolated

compact

easy to transport

STEEL CONSTRUCTION	STEEL SKELETON MADE OF 3mm - 4mm HOT DIP GALVANIZED SHEET METAL	
LOADS	ROOF LOAD	80 kg / m² - 150 kg / m²
	FLOOR LOAD	750 kg / m² - 1000 kg / m²
	WIND LOAD	80 kg / m² - 120 kg / m²
WALL PANELS	EXTERIOR SURFACE	0,50 mm - 0,70 mm TRAPEZOIDAL HOT DIP GALVANIZED SHEET METAL
	INTERIOR SURFACE	0,50 mm - 0,70 mm HOT DIP GALVANIZED SHEET METAL
	INSULATION	60 mm - 80 mm POLYSTRENE FOAM
	SURFACE PAINT	ELECTROSTATIC POWDER PAINTED
CHASIS	EXTERIOR SURFACE	0,50 mm - 0,70 mm TRAPEZOIDAL HOT DIP GALVANIZED SHEET METAL
	INTERIOR SURFACE	18 mm CEMENTBOARD
	INSULATION	60 mm - 80 mm POLYSTRENE FOAM
	STEEL SKALETON	MADE OF 3-4 mm HOT DIP GALVANIZED SHEET METAL
	FLOOR COVERING	ANTISTATIC LINOLEUM / PVC 2 mm
CEILING	EXTERIOR SURFACE	0,50 mm - 0,70 mm TRAPEZOIDAL HOT DIP GALVANIZED SHEET METAL
	INTERIOR SURFACE	0,40 mm - 0,70 mm HOT DIP GALVANIZED SHEET METAL
	INSULATION	50 mm POLYURETHANE - 80 mm GLASSWOOL
	STEEL SKALETON	MADE OF 3-4 mm HOT DIP GALVANIZED SHEET METAL
EXTERIOR DOORS	DOOR FRAME	1,50 mm - 2,05 mm GALVANIZED SHEET METAL
	DOOR SURFACE	0,70 mm - 1,25 mm GALVANIZED SHEET METAL
	INSULATION	50 mm POLYSTYRENE
	PAINT	ELECTROSTATIC POWDER PAINTED
	DOOR OPENING	WITH 3 - 4 SPECIAL MOUNTED TO DOOR FRAME
	WEATHER LEAKAGE	RUBBEN JOINT BETWEEN DOOR AND DOOR FRAME
ELECTRICAL INSTALLATION	ELECTRICAL SOCKETS, SWITCH	
	1 INDOOR LIGHTING ARMATURE 2X36 W	
GENERAL	STEEL PIECES HOT DIP GALVANIZED	
	SURFACES ELECTROSTATIC POWDER PAINTED	
	SHELTER IS DEMONTABLE	
	GALVANIZED NUTS AND I	BOLTS



OPTIONAL ACCESSORIES

- Heating / cooling system
- Air condition safety cage
- Power distribution board
- External lighting
- Steel mesh doormat
- 5 kg CO2 fire extinguisher
- Emergency evacuation arm
- 18 watt emergency light
- Cable ladder
- Leveling legs
- Grounding bar
- Additional roof, furniture...

OPTIONAL DETECTORS

- Opened door detector
- Temprature sensor
- Movement detector
- Power generator detector (start / stop)
- Level of diesel oil detector
- Fire / Smoke detector
- Humidity detector
- Surveillance camera system
- Alarm system
- Panel of alarms that receive the information of the sensors and send to NMS











