

COMMUNICATION UNIT

DM540-GL

HIGHLIGHTS

- Compliant with TEDAŞ MLZ/2024-082 Technical Specification
- MASS-compatible modular modem
- 2G+4G cellular communication
- RS485 communication
- 1 digital dry-contact input
- Optional relay output
- Remote software update



MASS compatible • 2G+4G • RS485

2G+4G

Cellular Communication

RS485

Serial Communication

MASS

Compatible

LOW POWER

Average 1W

PRODUCT OVERVIEW

DM540-GL

DM540-GL is a modular modem designed for hardware and software compatibility with National Smart Meter Systems (MASS). It complies with the TEDAŞ MLZ/2024-082 Technical Specification.

It can be installed in the modem slot of Pro meters compliant with TEDAŞ MLZ/2017-062.B. It is powered by the connected meter and enables remote reading of that meter.

Other meters connected by cable via the RS485 terminals can also be read. Cellular communication is provided over 2G/4G.

METER INTEGRATION

- Can be installed in the modem slot of Pro meters
- Powered by the connected meter
- Enables remote reading of the connected meter
- Other meters connected via RS485 can also be read

MASS / PRO METER

MASS compatible; can be installed in the modem slot of Pro meters compliant with TEDAŞ MLZ/2017-062.B.

DM540-GL

TECHNICAL SPECIFICATIONS

COMMUNICATION UNIT

CAT 1
LTE

2G+4G
Network

12 VDC
Supply

3 W
Max. Power

-30 / +70°C
Operating

Cellular

LTE Category	Cat 1
LTE Bands	B1/B3/B7/B8/B20/B28/B38/B40/B41
GSM Band	B3/B8 : 900/1800 MHz
GPRS Class	GPRS 12

Communication

Client Mode	Sends alarm and scheduled task results
Server Mode	Accepts permitted incoming connections and responds to queries
RS485-1	Direct meter connection, automatic direction control
RS485-2	Optional
USB	USB 2.0
Protocol	Meter: IEC62056-21 Mode-C + AKM Protocol
Update	Locally via serial cable or remotely via HTTP / FTP

Inputs and Outputs

Digital Input	1 digital dry-contact input
Relay Output	1 optional relay output, 250 VAC, 5 A

Physical and Electrical

Enclosure	UL 94 V0 flammability class Dimensions (mm): 114 x 74.3 x 42
SIM card socket	Externally accessible (push-push)
Second SIM	Optional embedded SIM support (production option)
Supply Voltage	Nominal: 12 VDC
Power	Maximum 3 W, average 1 W
Auxiliary Power	Supercapacitor or Li-Po system battery (production option; Li-Po only on DM540-GL-B)
Operating Temperature	Operates from -30°C to +70°C
Antenna Connector	SMA connector

Additional Hardware Features

Memory	32 MB / 64 MB / 128 MB (varies by production option)
Indicators	LED array indicating device power, SIM card presence, communication activity, and mobile network connection
MASS / Pro Meter Compatibility	MASS compatible; can be installed in the modem slot of Pro meters compliant with TEDAŞ MLZ/2017-062.B

