

MO-485

RS-485 Optical Probe

Connects straight to industrial RS-485 buses with MCU-free automatic direction control.

OVERVIEW

MO-485 connects the optical port straight to an industrial RS-485 bus. Direction control is entirely in hardware: the driver turns on the instant the line talks and off when it stops; no MCU, no software latency, no lock-ups in between. AMR modems, RTUs and PLCs talk to the meter as if through their own serial port. Designed for permanent panel installation, with a wide supply range and industrial temperature tolerance it stays in place for years.

HIGHLIGHTS

- Hardware automatic direction control — no MCU, no turnaround delay, no lock-ups
- Half-duplex RS-485, drops directly onto multi-device buses
- Compatible with AMR modems and PLC/RTU systems
- Wide supply range, built for industrial environments
- Bus traffic visible on TX/RX LEDs
- Optional 120 Ω line termination
- High EMC immunity — designed for panel environments

LED INDICATORS

- **PWR** Device powered
- **TX** Sending data to the meter
- **RX** Receiving data from the meter
- **RDY** Link established / paired

COMPATIBILITY

All electricity, gas and water meters with an IEC 62056-21 (IEC 1107) optical port. DLMS/COSEM and mode-E switching are carried transparently. Compatible with the TEDAŞ MASS ecosystem.

SPECIFICATIONS

Arayüz / Interface	RS-485 half-duplex
Yön Kontrolü / Direction	Otomatik, donanımsal / Automatic, hardware
Baud	300 – 115200
Besleme / Power	5 – 24 VDC
Kablo / Cable	1.8 m (A, B, V+, GND)
Optik / Optics	IEC 62056-21 kafa / head, 880 nm IR
Mıknatıs / Magnet	Halka tip / ring, ≥ 15 N
Sıcaklık / Temp.	-25 ... +70 °C
Gövde / Housing	ABS, siyah / black
Standartlar / Standards	IEC 62056-21 · IEC 1107 · DLMS/COSEM · MASS