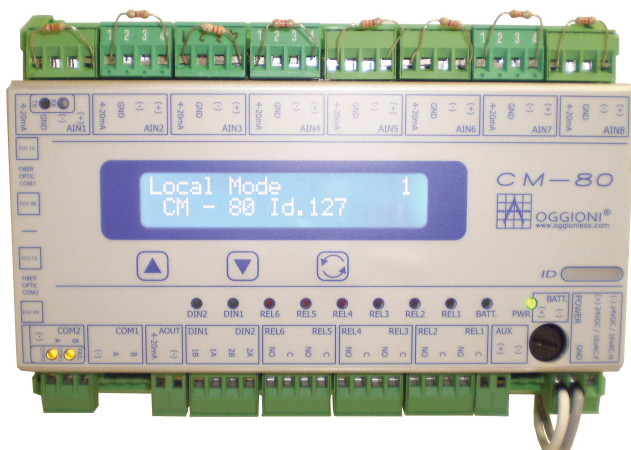# CM-80T4-ID
Gas Detection Control Unit

GENERAL DESCRIPTION

CM-80T4-ID control units are a series of data acquisition and control modules, for digital signals ideal for medium and small gas detection systems.

Different gas detectors for different gases (including oxygen gas detectors for both deficiency and excess) can be connected to CM-80T4-ID control units.

All parameters as: gas type, gas detectors full range, 3 alarm thresholds (S1, S2 and S3) and relay outputs status and assignment are programmable by operator by PC using the CM-80T4-ID_ProgSim software. Operations as enabling or disabling inputs and/or outputs, alrms acknowledgment and reset etc. can be performed with onboard menu, password protected.

An event log is available on CM-80T4-ID showing the last events in order of appearance (from the latest to the oldest).

The serial line RS485 feature make this control panel a good and cheap solution for Addressable gas detection systems with possibility to connect a maximum of 64 gas detectors and a maximum of 8 I/O remote modules. Integrated battery charger - power supply (only cabinet version).

CM-80T4-ID control units have internal stabilized 24Vdc 2.5A Power Supply and a 24V output for 7,2 A/h back-up batteries. A built-in protective circuit controls the battery efficiency, isolating it in case of under or over voltage.

CM-80T4-ID can be supplied in "Open Frame" version or installed in "Wall mounting cabinet" including power supplier, completely wired.
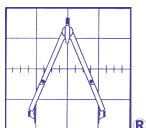
Applications:

Multigas detection systems
Addressable gas detection systems
Industrial gas detection systems
Commercial buildings
Gas Storage plants and warehouses
Waste water plants
Car parkings monitoring
Building automation
Process monitor system
Security system

Main Characteristic

2 Optocoupled Digital inputs
Redundant RS485 Serial Line Modbus RTU Protocol (Two RS-485 drivers).
Two Optical Cable Drivers for long distances connections (62.5/125 um 3.5 db/Km) are available as option.
Backup battery circuit.
Backlighted LCD display 2 lines x 20 characters for on site main information visualization.
Front graphic panel with connection indications for easy handling by installer.

GENERAL SPECIFICATIONS

Double Serial Line	RS-485 Modbus RTU Protocol
Baud rate:	19200 Kbps.
6 x Programmable Relays	Free Voltage contacts SPDT
8 x Analogue Inputs	4-20mA
2 x Digital Inputs	Optocoupled
Fiber Optic Driver (Option)	62.5/125um (3,5dB/Km.)

ENVIRONMENTAL SPECIFICATIONS

EMC	According to EN61000-4
Storage temperature	-40 to 85 °C
Operating temperature	-20 to 70 °C
Humidity range	90% R.H. n.c.

MECHANICAL SPECIFICATIONS

Overall dimensions	185 x 130 x 70 mm (Openframe)
	455 x 300 x 300 mm (Cabinet 10" IP20)
	500 x 400 x 200 mm (Cabinet 10" IP66)
	345 x 600 x 345 mm (Cabinet 19" IP55)
Mounting rails	Din 41612
Cabling	Screw terminals AWG 26...14
Material	Laminated steel, painted
Weight	0,4 Kg.(Openframe)
	6,0 Kg. (Cabinet 10")

ELECTRICAL SPECIFICATIONS

Supply voltage (open frame)	24 Vdc
Supply voltage (cabinet)	220 Vac
Power Consumption	Max. 350mA at 24Vdc
Stab. power supply output	24 Vdc 0,5A
Supply Fuse	3A
Aux. Power Supply Fuse	1A
Overvoltage protection	± 50V.
Output Contacts	Free Voltage contacts SPDT
Contact Rating	3A at 30Vdc / 5A at 110Vac

PART NUMBER DESCRIPTION

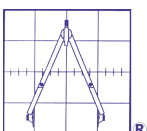| Configuration	Description
CM-80T4-ID	Openframe version
CM-80T4-ID-B	Wall Mounting 10" metal cabinet version IP20
CM-80T4-ID-B-IP66	Wall Mounting 10" polyester cabinet version IP66

ADDITIONAL I/O MODULES

REM-485-T0	Plug in card 12 output relays SPST max. 3A @ 24 Vdc
REM-485-T1	Plug in card 4 output relays SPST + 8 Open Collector monitored outputs max. 1A @ 24 Vdc
REM-485-T2	Plug in card 8 Analogue 4-20mA protected inputs
REM-485-T4	Plug in card 8 Analogue 4-20mA protected inputs + 6 output relays + 2 digital inputs
CM-80T4	Control panel 8 analogue 4-20mA inputs + 6 output relays connectable as slave module to CM-80T4-ID

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