

ULYS MCM MULTI-CHANNEL METER



Compact : 18 three-phase meters in 1

Quick implementation

Compatible with a large number of sensors









Ulys MCM

ULYS MCM helps you to reduce your equipment and installation costs for your instrumentation projects

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Our 5 advantages

18 meters in 1!

Basing its operation on a single voltage measurement for all the feeders, the Ulys MCM benefits from a compact design.

- In three-phase use
 - ▶ up to 18 meters
- In single-phase use
 - ▶ up to 54 meters

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Quick, reliable implementation

The whole current measurement connection chain on the Ulys MCM has been designed to facilitate its implementation.

The current sensors are connected using RJ12 quick connection technology which can be hooked up with a click using a cable prepared before installation, thus limiting the risk of cabling errors. The technology of the current sensors eliminates the electrical risk: there is no need to install a short-circuit device to secure the installation.

Compatible with a large number of sensors

The Ulys MCM is compatible with a whole range of sensors :

- Our Miniflex flexible sensors using Rogowski technology offer an ideal solution for connection to high currents and/or multiple conductors (particularly the general feeders of installations) because they are very easy to install
- Current transformer clips sufficiently compact for integration in confined spaces and for low current feeders

Flexible the Ulys MCM can be used with three-phase feeders incorporating both types of sensors, i.e. MiniFlex and TC CLIP.

The Ulys MCM's large capacity will enable it to evolve to handle new requirements.

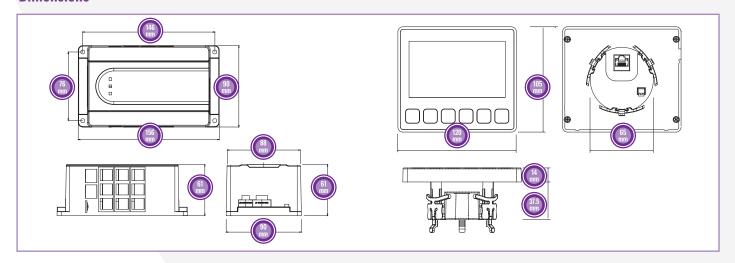
Detailed, comprehensive information

The Ulys MCM measures all the energy values (kWh, kVArh, etc.) and electrical quantities (V, U, I, F, PF, unbalance, etc.) for each electrical feeder equipped with instrumentation. A probe is supplied to measure temperature. The product may be equipped with a remote screen, connected to the Ulys MCM via a simple cable, to display all the information on the front panel of the cabinet.

Universal communication
The Ulys MCM can be

The Ulys MCM can be connected to any Ethernet or RS485 network using the same model, so that it can be queried remotely in real time by a PLC.

Dimensions



All the technical information you need to get to know the ULYS MCM better

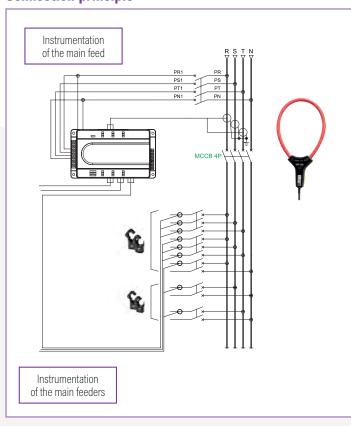
General description

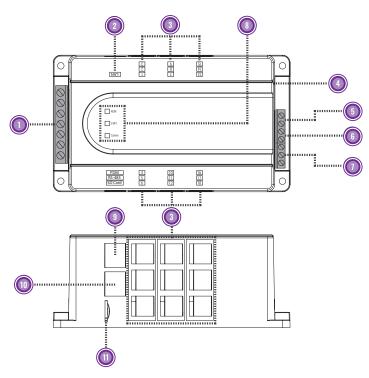
Description of the ULYS MCM

| Ν° | Designation | Description | |
|----|-------------------------|---|--|
| 1 | Input voltage* | Input voltage terminal for the measurements | |
| 2 | Ethernet port | Communication with master (Modbus slave) Protocol: Modbus TCP/IP Speed: 10/100 Mbit/s | |
| 3 | Port TC 1 ~ 18 | RJ12 connectors for connection to the current sensor | |
| 4 | Temp. sensor | NTC temperature sensor NTC temperature measurement at the level of the port. | |
| 5 | On-off output* | On-off output terminal Rated specifications: 250 V \sim /5 A, 30 Vp-p/5A resistive | |
| 6 | On-off input* | On-off input terminal Rated specifications; 220 V ~ locking input voltage required | |
| 7 | Auxiliary power supply* | Auxiliary power supply of the ULYS MCM | |
| 8 | Status LED | | |
| 9 | PDM port | RS232 port to connect the PC or ULYS MCM D remote screen | |
| 10 | RS485 port | RS485 port to connect the PC or an external PLC | |
| 11 | SD card housing | Housing of the micro-SD card | |

^{*}The cross-section of the connection cable must be from 0.5 mm2 à 2.5 mm2 (minimum : AWG 26, maximum: AWG 12). The tightening torque of the wiring in the field is 0.4 Nm.

Connection principle





| De | signation | Specifications | |
|--|-----------------------|--|--|
| Electrical system | | 1P2W, 3P3W, 3P4W | |
| | Voltage (Umin - Umax) | 43-690 V ~ between phases | |
| | Voltage (Vmin - Vmax) | 25-400 V ~ between phases and neutral | |
| Rated | Measurement category | Cat III | |
| input | Frequency | 45-65 Hz | |
| specifications | Current | 0-333 mV (max 0.5 V p-p) Impedance : 20 k Ω | |
| | On-off input | 1 point, 230 V ~, external power supply | |
| | NTC temperature | 25° C, 10 kΩ, (β(25/85) = 3 970° k) | |
| | Voltage | 100-240 V ~ | |
| Auxiliary | Frequency | 50-60 Hz | |
| power | Max. voltage (L-N) | Short-term : 1,440 V \sim - Long-term : 490 V \sim | |
| supply | Consumption | 0.09-0.09 A | |
| | Overvoltage category | Cat II | |
| Communication | | Modbus RS485 Modbus TCP RS232 | |
| Output contact | | 1 NO (normally open) SPST (single pole single throw) | |
| Pollution degree |) | 2 | |
| Altitude | | ≤ 2 000 m | |
| Operating temperature Storage temperature | | - 10° C to + 55° C -25° C ^{to} + 70° C | |
| Max. humidity | | 5-80% RH without condensation | |
| Ingress protection as per IEC 60529 | | IP20 IP40: ULYS MCM D front panel | |
| For indoor use only | | | |

To answer your questions (and choose your references)

How many three-phase feeders do you need?

Up to 9 electrical feeders:

Between 10 and 18 electrical feeders:

P01331062

ULYS MCM 9

P01331064 ULYS MCM

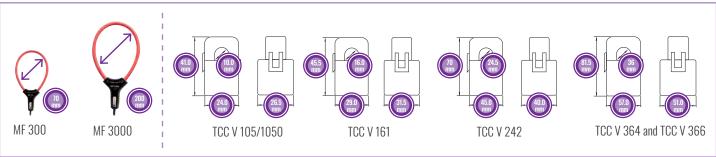
Which sensors do you want?

(may differ for each feeder, supplied in kits of 3)

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|--------------------------------|---------------------------|--------------------|----------|
| P01379616 | PACK 3 TCC V 105 | 5A / 333mV | 10mm |
| P01379626 | PACK 3 TCC V 1050 | 50A / 333mV | 10mm |
| P01379618 | PACK 3 TCC V 161 | 100A / 333mV | 16mm |
| P01379620 | PACK 3 TCC V 242 | 250A / 333mV | 24mm |
| P01379622 | PACK 3 TCC V 364 | 400A / 333mV | 36mm |
| P01379624 | PACK 3 TCC V 366 | 600A / 333mV | 36mm |
| P01379631 | PACK 3 MF300 | 600A (1A / 39,1µV) | 70mm |
| P01379633 | PACK 3 MF3000 | 3000A 1A / 39,1µV) | 200mm |

Our MiniFlex sensors

Our current transformers



What is the distance between your Ulys MCM and your sensors?

(may differ for each feeder)

| (illay ullior for cacil locuci) | | | 34 | 272223 COT 100 |
|---------------------------------|---------------|------------|------|--|
| P01379641 | RJ12M-RJ12M M | ≤ 3 metres | | |
| P01379642 | RJ12M-RJ12M L | ≤ 9 metres | A | A R R X A |
| | | | 1000 | A STATE OF THE STA |

Do you want to equip your Ulys MCM with a screen?

| P01331065 | ULYS MCM D | Screen |
|-----------|---------------|-------------------|
| P01379640 | RJ45M-RJ45M M | Connection cable* |

^{*}Cable essential to connect the screen



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