

## ULYS MCM MULTI-CHANNEL METER

CHAUVIN

2016-01-12 11:08-1

600

10112

Ulys MCM

16

CHAUVIN

456

Measure up

550'15

219.16 220.79

NV1

PDM R5-485

The solution for centralizing measurement on multiple electrical feeders

**C**ompact : 18 three-phase meters in 1

Quick implementation

**C**ompatible with a large number of sensors



# 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

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

# 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.

# 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.

2

## Compatible with a large number of sensors

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

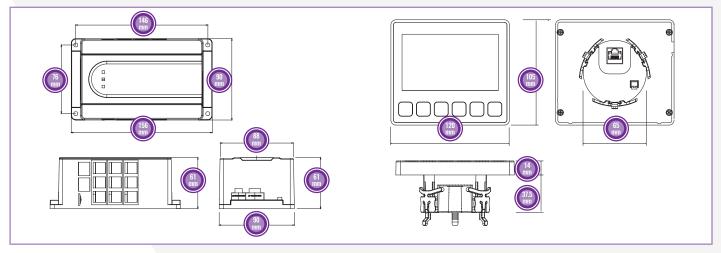
• Our Miniflex flexible sensors using Rogowski technology offer an ideal solution for connection to high currents and/or multiple conductors (particularly the general feeders of installations) because they are very easy to install

• 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 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

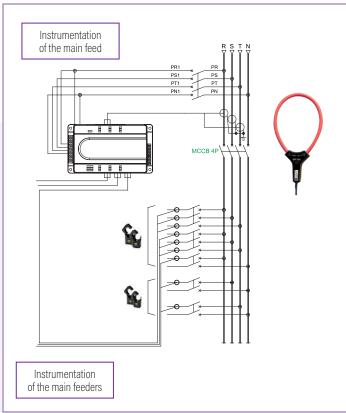
## **General description**

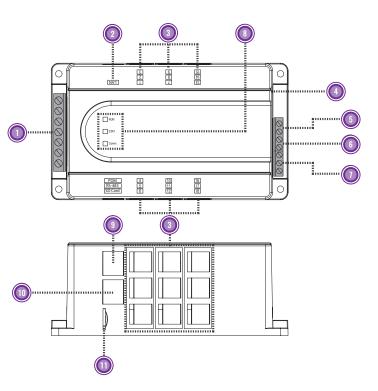
#### **Description of the ULYS MCM**

N٥	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 ~ /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	esignation	Specifications			
Electrical syster	n	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			
	On-off input	1 point, 230 V ~, external power supply			
	NTC temperature	25° C, 10 kΩ, (ß(25/85) = 3 970° k)			
	Voltage	100-240 V ~			
Auxiliary	Frequency	50-60 Hz			
power	Max. voltage (L-N)	Short-term: 1,440 V ~ - Long-term: 490 V ~			
supply	Consumption	0.09-0.09 A			
	Overvoltage category	Cat II			
Communication		Modbus RS485			
Communication		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 <sup>to</sup> + 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 ?

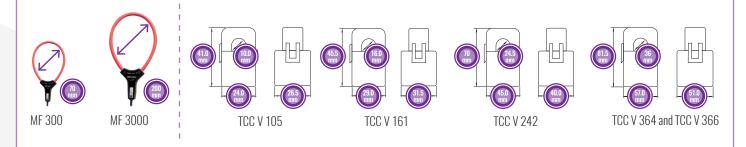
Up to 9 electrical feeders:			Between 10 and 18 electrical feeders:		
P01331062	ULYS MCM 9		P01331064	ULYS MCM 18	

#### Which sensors do you want ?

(may differ for each feede	r, supplied in kits of 3)	Ratio	Diameter
P01379616	PACK 3 TCC V 105	5A / 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)				
P01379641	RJ12M-RJ12M M	≤ 3 metres	-	
P01379642	RJ12M-RJ12M L	≤ 9 metres	E	Y A
			10	

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

P01331065 P01379640 ULYS MCM D RJ45M-RJ45M M

Connection cable\*

Screen





\*Cable essential to connect the screen

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