

MEMO & ULYS Submeters



Single-phase or three-phase, with direct connection or connection via CT

Integrated communication: Ethernet, Modbus

Metering, submetering, energy monitoring, rebilling

**Comprehensive
solution for
implementation of a
metering plan**

Measure up



Measuring to learn, allocate and

Energy efficiency is not just a social project, but a major economic issue in the context of **an action plan for control** sectors of the economy and all fields of activity, seen as a whole.

The new **regulations and certifications** for installations, implemented at national level to boost savings and reduce the

Monitoring and operation

All single-phase feeders up to 100 A



No disconnection

Installation and quick, simple implementation of the meters linked to our non-intrusive sensors



Energy monitoring

Metering solution for the energy monitoring market



Energy balance

Production / consumption



Management of grouped feeders

- Compact: 18 three-phase meters in one
- Quick implementation
- Compatible with a large number of sensors

ULYS MCM – Multichannel meter



ULYS TT - M Ethernet



METER – MEASURE

COLLECT – HISTORIZE

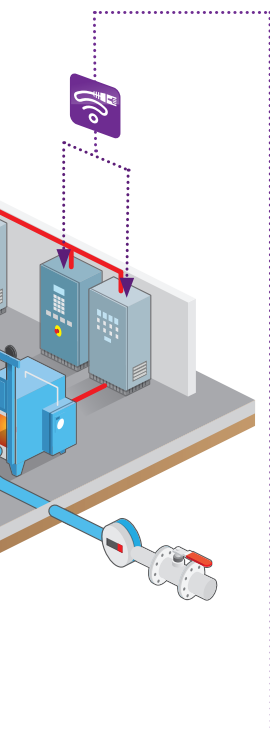
ANALYZE – ACT

and monitor

and reduction of energy consumption. The incentive measures developed by all the policies worldwide target all impact on the environment, help to meet the need for optimization of installations' energy performance.

Monitoring

Compatible with all monitoring solutions on the



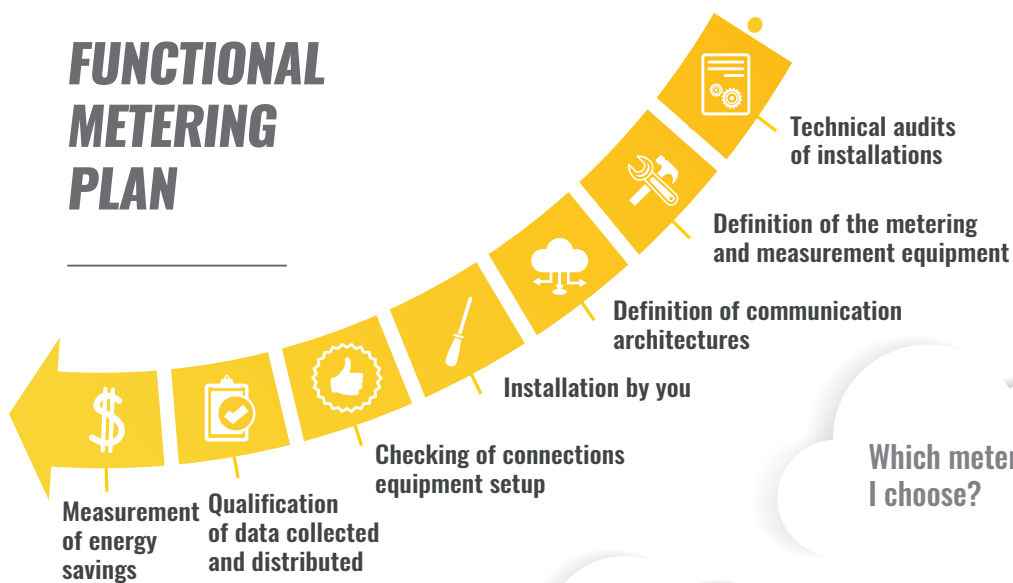
Management of isolated feeders

Connection to your existing Ethernet network.
Storage of the consumption data history
Accessible via its WEB pages / FTP push

From construction to industry
HQE, RT2012/ 20, LEED, ISO 50001, BREAM...

Accompanying you at every stage of your project!

FUNCTIONAL METERING PLAN



Which meter should I choose?

Where should I install my meters?

How do I process my data?

Are my data reliable and consistent?

MID METERS



Mandatory for rebilling of active energy on the basis of consumption readings by index difference.
Chauvin Arnoux Energy's active energy meters are MID-certified. Their names include the indication «-M», e.g. ULYS MD45-M



MEMO & ULYS M

... To implement y

MEMO RANGE

METERING ESSENTIALS



Optimized inventory
A limited number of references
suitable for the most common
electrical feeders



Clear, simple display
Direct access to your consumption data



No prior parameter settings
Operational as soon as it is
powered up



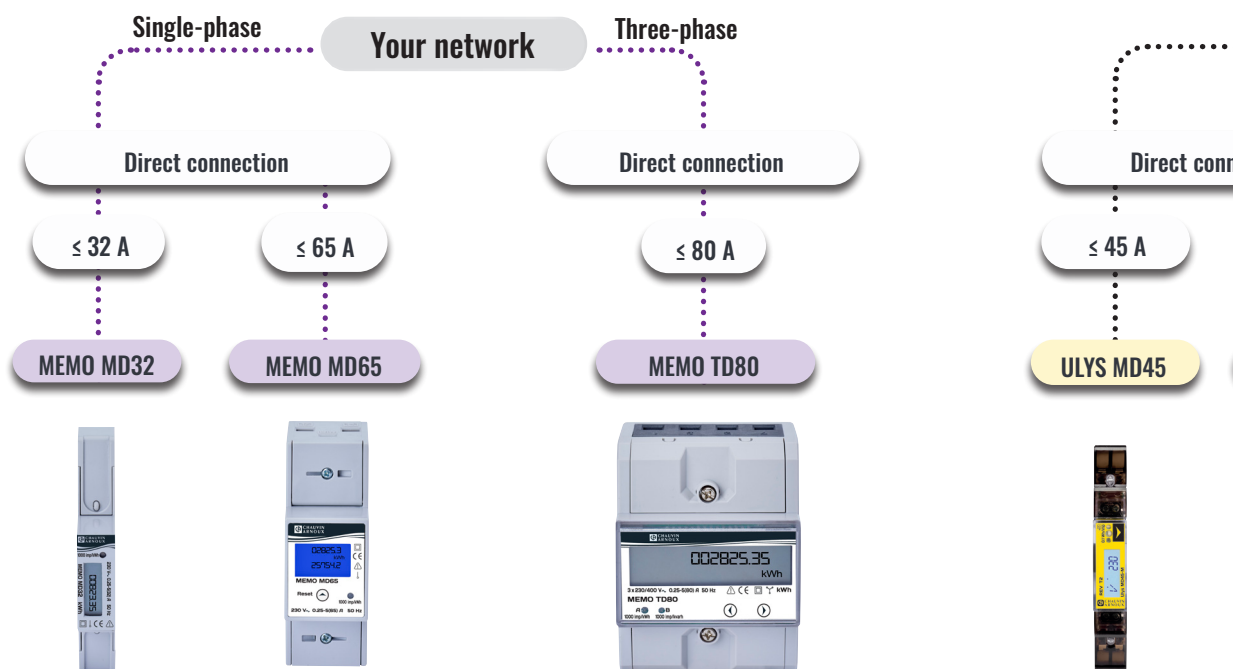
Interoperability
Integrated communication
(Ethernet) and
compact case

IEC 62053-21

Monitoring and
allocation of
consumption

MID EN50470-3

Electrical energy
rebilling on private
network



	IEC	IEC	IEC	MID
NON-COMMUNICATING	MEMO MD32 P01330740	MEMO MD65 P01330741	MEMO TD80 P01330745	ULYS MD45-M P01330754
RS 485 MODBUS	-	-	-	ULYS MD45-M Modbus P01330756
Ethernet Modbus/ TCP	-	-	-	-

MODULAR METERS

our metering plan

ULYS RANGE

HIGH-PERFORMANCE CONNECTED METERING PLAN

Ability
communication (Modbus,
and pulse outputs in a
ring



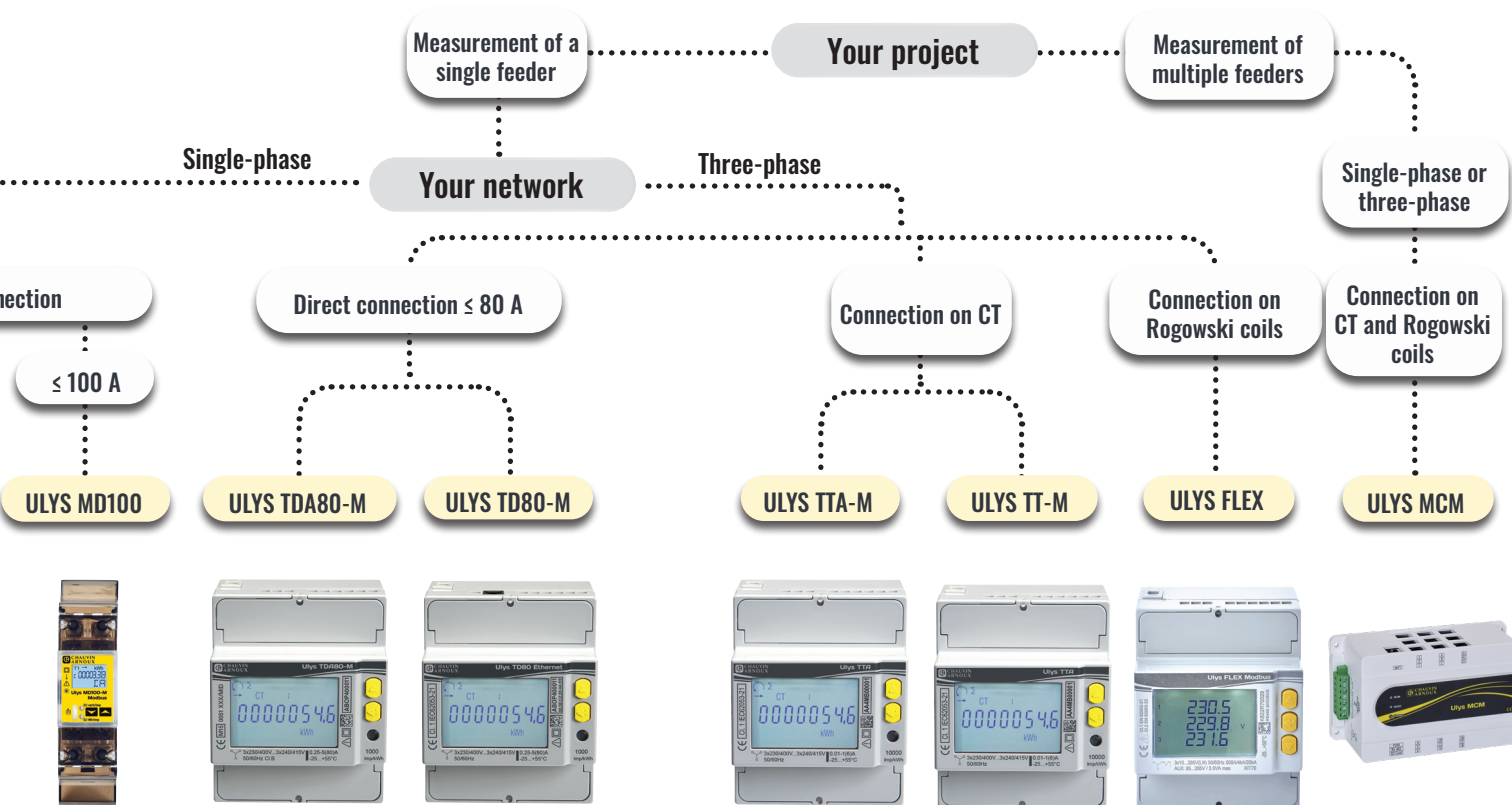
Fair rebilling
MID, double tariff, partial
metering



Customizable multi-measurement
Configurable display. Local or remote
access, via web pages or push FTP



Easy implementation
Wide range of sensors for current
measurement



MID	MID	MID	MID	MID	IEC	IEC
ULYS MD100-M P01330760	ULYS TDA80-M P01331018	-	ULYS TTA-M P01331019	-	-	-
ULYS MD100-M Modbus P01330761	-	ULYS TD80-M Modbus P01331036	-	ULYS TT-M Modbus P01331037	ULYS FLEX Modbus P01331048 P01331049	ULYS MCM 9 feeders P01331062
-	-	ULYS TD80-M Ethernet P01331040	-	ULYS TT-M Ethernet P01331041	-	ULYS MCM 18 feeders P01331064 See dedicated documentation

Choose the right meter...

MEMO RANGE

			Single-phase		Three-phase
			MEMO MD32	MEMO MD65	MEMO TD80
Model					
Rating			32 A	65 A	80 A
MID Certification			no	no	no
Accuracy class			IEC Class 1	IEC Class 1	IEC Class 1
Installation	Format	DIN modules	1	2	4
	Power supply		Self-powered		
	Rated voltage		230 Vac	230 Vac	230/400 Vac
	Inputs	Direct/Sensors	Direct 32 A	Direct 65 A	Direct 80 A
Energy metering and management	Display and communication (if available)		Total kWh	Total and partial kWh	Total and partial kWh
Multi-measurement	Display and communication (if available)		-	-	-
Recordings / Push FTP			-	-	-
Inputs / Outputs	Pulse output(s)		1	1	1
	Tariff change input		-	-	-
Communication	RS485 Modbus		-	-	-
	Ethernet Modbus		-	-	-

To order

MEMO MD32 P01330740

MEMO MD65 P01330741

MEMO TD80 P01330745

Single-phase

ULYS MD45-M	
	
45 A	
yes	
1	
230 Vac	
Direct 45 A	
Bidirectional, kWh, total kVAh and partial kWh	
V, I, P, Q, S, F, PF	
1	
ULYS MD45-M	
ULYS MD45-M Modbus	
-	
ULYS MD45-M P01330754	
ULYS MD45-M Modbus P01330756	

More than just an energy meter



ULYS TD80 / TT Ethernet

The simple, stand-alone solution for recording all the electrical activity on a feeder:

- Processing via integrated web pages
- Synchronized recordings of the electrical quantities
- Data transmission on ftp server

Quickly identify the MID meters marked "M"



To

ULYS RANGE

Phase	Three-phase			Multi-feeder
ULYS MD100-M	ULYS TDA80-M ULYS TD80-M	ULYS TTA-M ULYS TT-M	ULYS FLEX Modbus	ULYS MCM
				
100 A	80 A	Sur TC 1/5 A	0,3 to 20000 A	Jusqu'à 3000A
yes	yes	yes	no	no
MID Class B			IEC Class 1	IEC Class 0.5
2	4	4	4	8 (156x90x61)
Self-powered			85-265 Vac	100-240 Vac
230 Vac	230/400 Vac	230/400 Vac	10/17 to 285/495 Vac	25 to 400 Vac (P-P)
Direct 100 A	Direct 80 A	Isolated 1/5 A	On Rogowski coils	x9 or x18 feeders on CT or on Rogowski loops
Bidirectional, kWh, total kVAh and partial kWh	Bidirectional, kWh, kVAh, total, partial and per phase	Bidirectional, kWh, kVAh, total, partial and per phase	Bidirectional, kWh, kVAh, total, partial and per phase	kWhh, kVAh, kVAh per feeder
V, I, P, Q, S, F, PF	V, U, I, P, Q, S, F, PF, ΣP, ΣQ, ΣS	V, U, I, P, Q, S, F, PF, ΣP, ΣQ, ΣS	V, U, I, P, Q, S, F, PF, ΣP, ΣQ, ΣS	V, U, F, I, P, Q, S, PF, ΣP, ΣQ, ΣS per feeder
-	Ethernet model		-	-
2	2 on TDA80-M - 1 on TD80-M	2 on TTA-M - 1 on TT-M	1 (alarm or pulse)	1
ULYS MD100-M	1 (except Ethernet model)	1 (except Ethernet model)	no	no
ULYS MD100-M Modbus	ULYS TD80-M Modbus	ULYS TT-M Modbus	ULYS-FLEX Modbus	On all models
-	ULYS TD80-M Ethernet	ULYS TT-M Ethernet	-	
ULYS MD100-M P01330760	ULYS TDA80-M P01331018	ULYS TTA-M P01331019	ULYSFLEX Modbus Kit 30/10 P01331048	ULYS MCM 9 P01331062
ULYS MD100-M Modbus P01330761	ULYS TD80-M Modbus P01331036	ULYS TT-M Modbus P01331037	ULYSFLEX Modbus Kit 70/10 P01331049	ULYS MCM 18 P01331064
	ULYS TD80-M Ethernet P01331040	ULYS TT-M Ethernet P01331041		For accessories (CTs, cables, screens), please contact us

complete your ULYS TT models




Current transformer offer

TC CLIP 100 A / 1 A	TCR 100 A / 1 or 5 A
TC CLIP 250 A / 1 A	TCR 150 A / 1 or 5 A
TC CLIP 400 A / 1 A	TCR 200 A / 1 or 5 A

Strengths of ULYS MCM

-  **Compact**
18 meters in one
-  **Small size**
Thanks to its innovative design
-  **Compatible**
With a large number of sensors
-  **Quick**
to set up

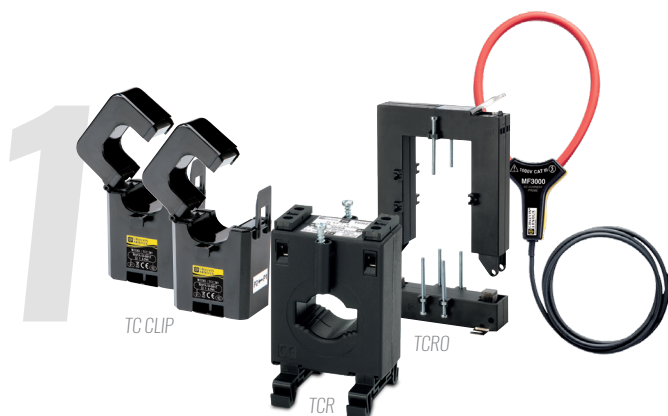
From electrical measurement to managing energy performance

Drawing on long experience in energy monitoring of applications, **Chauvin Arnoux Energy** develops **products and services** to simplify control of all energy consumption, particularly in the context of an **ISO 50001** approach.

Current transformers

Range of split-core or closed-core current sensors

- Current from 1 to 5,000 A
- CT technology (1 A, 5 A, 333 mV) or Rogowski coils or measuring shunts
- Wide offering for any type of conductor and any level of space constraints
- Easy to install while maintaining safety on the installation



Comprehensive monitoring of LV/HV power quality

Range of panel-mounted power monitors

- From 0.2s critical electrical monitoring to the collection of all-utilities metering data
- Analysis of the electrical feeder: alarms, recordings, harmonics, EN50160
- Compliance with the demanding electrical measurement standards: IEC61557-12, IEC62053-21/22



THE APPLICATIONS UNIT Chauvin Arnoux Energy

To accompany you:

- in the choice of the solutions to be implemented
- by commissioning the installations
- by training users on site or in our premises

Don't hesitate to contact us

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