

ULYS MD45-M & ULYS TD100-M

MID METERS FOR AC ELECTRIC VEHICLE CHARGING STATIONS



Regulatory energy metering for secure transactions with our MID meters

- Compliant with the **MID Class B** regulations
- **Bidirectional** metering: consumption/production
- **Single-phase 45A – Three-phase 100A**
- Operating temperature: -40°C to +70°C
- **MODBUS RTU** communication

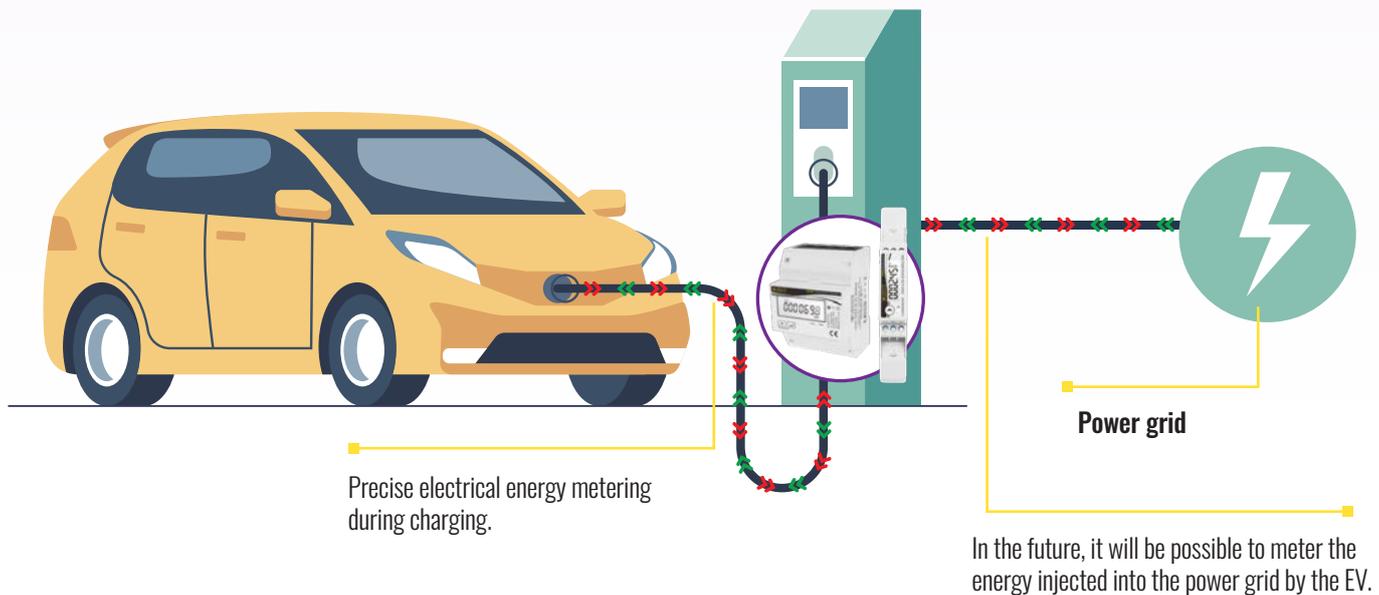


The ULYS MD45 and ULYS TD100 can be used to meter the energy injected and drawn with the required accuracy for MID certification

Choose these high-quality, rugged meters which are simple to integrate in your charging stations

The energy meter at the heart of the charging system

Trustworthy regulatory transactions for sharing the energy costs of charging.



Information

To take advantage of the ADVENIR bonus offered in France, a MID meter is mandatory.

Our five major strengths



A solution compliant with the MID directive:

Suitable for electrical energy metering and billing transactions



Reliable, accurate measurement:

Guaranteed accuracy over time (class 1)



Direct connection up to 100A for three-phase:

Quick, simple integration for all charging station power ratings



Metering of energy drawn / re-injected:

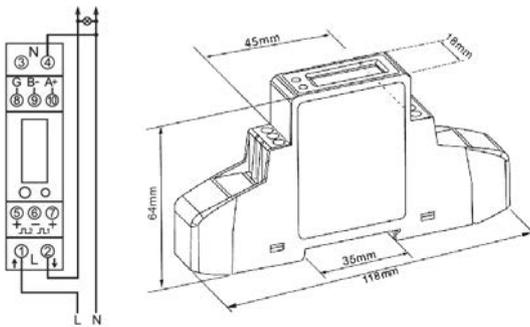
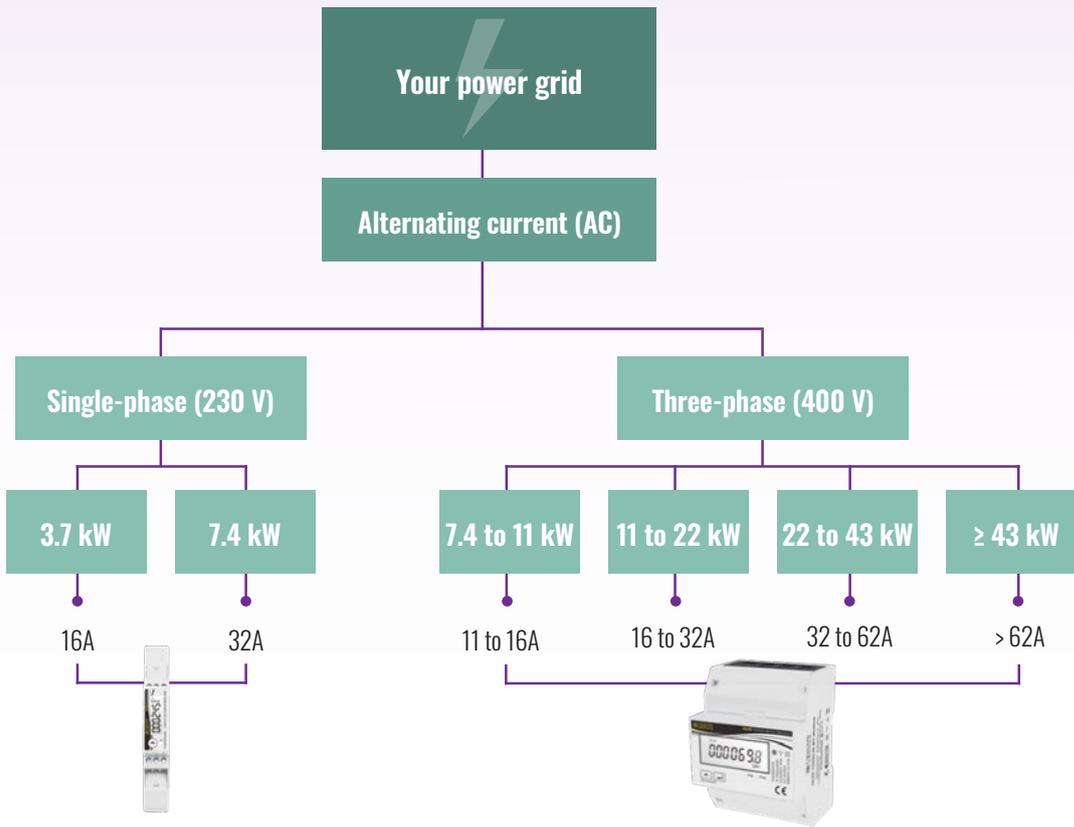
Meter compatible with the future Smart Grid networks and re-injection of energy into the grid (V2G)



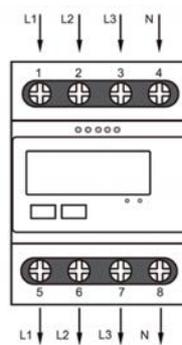
Universal data access:

Simple, fast communication with your meters via the RS 485 Modbus RTU output

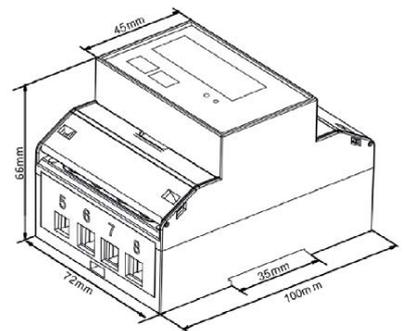
To choose your meter according to the power of your chargingstation



Connection and dimensions of the ULYS MD45-M



Connection and dimensions of the ULYS TD100-M



Where are they installed?



On public roads



For private fleets
(company, hotel, etc.)



Wallboxes for residential
charging (private individuals)

	ULYS MD45-M	ULYS TD100-M
Technical specifications	Single-phase grid	Three-phase grid
Maximum rated current (I _{max})	45 A	100 A
Reference current (I _{ref})	5 A	10 A
Starting current (I _{sk})	20 mA	40 mA
Voltage input	230 Vac (-15/+10%)	
Consumption	≤ 2 W/Phase - ≤ 10 VA/Phase	
Frequency	50 Hz ± 10%	
Metrological LED	10000 Imp/kWh	1,000 pulses/kWh
Pulse output weight	10,000/ 2,000/ 1,000/ 100/ 10/ 1/ 0.1/ 0.01 pulses/kWh	1,000/ 100/ 10/ 1 pulses/kWh
Pulse output width	≤ 5,625 W > 5,625 W	32 ms 11.2 ms
Max. pulse output operating voltage	5 - 27 V _{ac}	
Max. pulse output operating current	≤ 27 mA _{dc}	
Communication	RS485 Modbus	
Data storage	10 years without power	
Accuracy class	MID (Class 1)	
Multi-measurement		
Active energy	Total, partial, import, export	
Reactive energy	Total, import, export	
Multi-measurement	P, Q, S, V, I, PF, F	
Bidirectional	Yes	
Display		
Measuring circuit	10 mm ²	16 mm ²
Pulse output	1.5 mm ²	
Communication	1.5 mm ²	
Dimensions		
Height with terminal covers	117 mm	100 mm
Width	17.5 mm	72 mm
Depth	63 mm	66 mm
Weight	80 g	400 g
Mounting	On 35 mm DIN rail	
Environment		
Operating temperature	-40°C to +70°C	
Usage	Indoors	
Altitude	2,000 m max.	
Humidity: Operation / Storage	≤ 75% / ≤ 95%	≤ 90% / ≤ 95%
Ingress Protection	IP51	
Protection class	II	
Standards		
Electromagnetic compatibility	EN61326-1:2013 & EN61326-2-3	
Low-Voltage directive	EN61010-1 & 61010-2-30	
MID directive	EN50470-1 & EN50470-3	
To order	P01331081	P01331083

See all our energy efficiency solutions at www.chauvin-arnoux-energy.com

ULYS EV

Single-phase and three-phase meters particularly suited to applications in EV charging stations (EVCS).

RS485 Modbus RTU

Communicate with your meters in order to gather information on the universal electrical quantities: P, Q, S, V, I, PF, F.

Bidirectional

A single meter to measure the energy consumed and the energy pushed back into Smart GRID networks.



FRANCE
Chauvin Arnoux Energy
 16, rue Georges Besse
 92182 ANTONY Cedex
 Tél : +33 1 75 60 10 30
 Fax : +33 1 46 66 62 54
caenergy@chauvin-arnoux.com
www.chauvin-arnoux-energy.com

UNITED KINGDOM
Chauvin Arnoux Ltd
 Unit 1 Nelson Ct, Flagship Sq, Shaw Cross Business Pk
 Dewsbury, West Yorkshire - WF12 7TH
 Tel: +44 1924 460 494
 Fax: +44 1924 455 328
info@chauvin-arnoux.co.uk
www.chauvin-arnoux.com

MIDDLE EAST
Chauvin Arnoux Middle East
 P.O. BOX 60-154
 1241 2020 JAL EL DIB - LEBANON
 Tel: +961 1 890 425
 Fax: +961 1 890 424
camie@chauvin-arnoux.com
www.chauvin-arnoux.com

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ARNOUX
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