## FIMER



# Monitoring and control REACT-MTR-1PH

The REACT-MTR-1PH is a four-quadrant energy meter designed for residential buildings application. With its compact design, it provides a wide variety of electrical measurements to FIMER inverters<sup>1</sup> via RS-485 communication bus. REACT-MTR1-PH is a single phase meter up to 30 A.

The exceptional low power consumption of the meter, less than 1 VA, makes it economical in the long run.

#### Communication

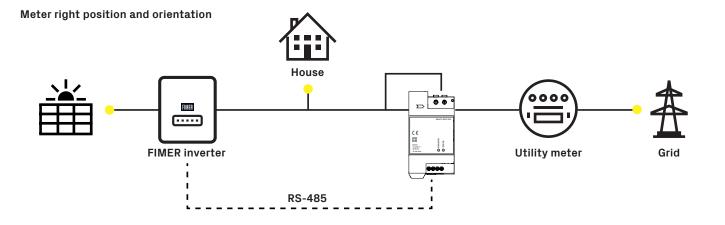
Data (electrical measurament) can be collected via built-in serial communication interface (RS-485).

Built-in leds show communication and grid power conditions

#### **Electrical measurements**

REACT-MTR-1PH meter support large number of electrical data readings. In particular:

- Active power, reactive power, apparent power,
- Voltage
- Current
- Power factor
- Frequency



### Technical data and types

Type code	REACT-MTR-1PH	
Voltage input		
Nominal voltage (Vnom)	230 V AC	
Voltage range	0.9 * Vnom - 1.1 * Vnom	
Power dissipation voltage circuits	< 1 VA (0,6 W) total	
Terminal wire area	0.5 - 4 mm²	
Recommended tightening torque	0.45 - 0.5 Nm	
Current input		
Maximum current I <sub>max</sub>	30 A	
Minimum current Imin	0.15 A	
Rated current IR	5 A	
cable max diameter	8 mm	
Current sensor inner diameter	8.5 mm	
Output		
Communication port	R\$485	
Communication protocol	Modbus RTU	
Ferminal wire area	0.14 - 1.5 mm <sup>2</sup>	
Recommended tightening torque	0.5 - 0.6 Nm	
General data		
Mounting method	DIN 43880 rail	
Frequency	50 Hz	
Frequency range	47.5 hz - 52.5 hz	
Power accuracy	active 1%; reactive 2%	
Environmental		
Operating temperature	-25°C - +70°C	
Storage temperature	-25°C - +85°C	
Humidity	75% yearly average, 95% on 30 days/year	
Altitude	< 2000 m	
Protection class	IP 21	
Standards and marking		
Standards	CE, IEC 61010-1, IEC91326-1	
Physical		
Width, height, depth	53 mm, 100 mm, 64 mm	
DIN modules	3	

1) For the compatible FIMER inverter list refer to the document "Meters supported by FIMER string inverters and the VSN700-05 Data Logger" available at www.fimer.com/solarinverters

Remark. Features not specifically listed in the present data sheet are not include in the product



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