

# EMT-1C/50 | 1C/300

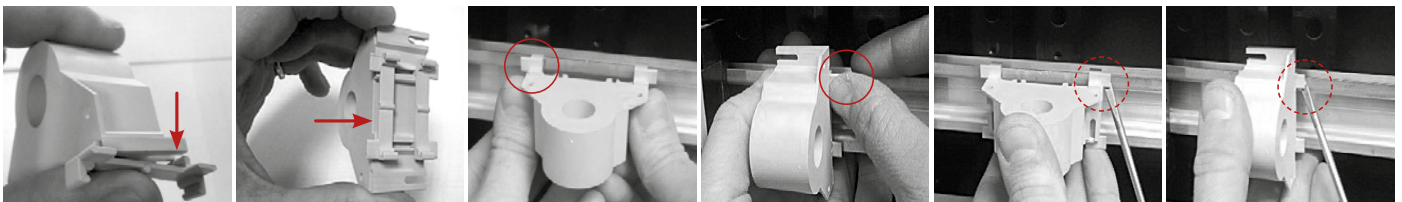
DIGITAL MEASURING INSTRUMENTS  
**MODULAR  
 MEASUREMENT  
 TRANSDUCER**



TECHNICAL CHARACTERISTICS		EMT-1C/50	EMT-1C/50 LV	EMT-1C/300	EMT-1C/300 LV
<b>AUXILIARY SUPPLY</b>					
Nominal voltage $U_s$		9...30 VDC		9...30 VDC	
Operating voltage range		-		-	
Power consumption		< 1,3W		< 1,3W	
Frequency		50 - 60 Hz		50 - 60 Hz	
<b>VOLTAGE INPUTS</b>					
Measurement range		Up to 800 VAC or 1000 VDC	Up to 80 VAC or 100 VDC	Up to 800 VAC or 1000 VDC	Up to 80 VAC or 100 VDC
Method of measuring		True RMS value		True RMS value	
<b>CURRENT INPUTS</b>					
Measurement range		Fino a 50A AC/DC		Fino a 300A AC o 400A DC	
Method of measuring		True RMS value		True RMS value	
<b>ACCURACY</b>					
Measures	Voltage	0.5%		0.5%	
	Current	0.5%		0.5%	
	Power	0.5%		0.5%	
	Frequency	± 0,1		± 0,1	
	Active energy	Class 1		Class 1	
<b>RS485 SERIAL INTERFACE</b>					
Baud-rate		Programmable 1200 - 115200 bps		Programmable 1200 - 115200 bps	
Protocol		Modbus RTU		Modbus RTU	
<b>INSULATION</b>					
Insulation voltage		3 kV on bare wire for current measure 4 kV for Voltage measure		3 kV on bare wire for current measure 4 kV for Voltage measure	
<b>AMBIENT CONDITION</b>					
Operating temperature		-15...+65°C		-15...+65°C	
Storage temperature		-40...+85°C		-40...+85°C	
<b>HOUSING</b>					
Version		DIN rail clips for vertical/horizontal mounting		DIN rail clips for vertical/horizontal mounting	
Filling		Epoxy resin		Epoxy resin	
Degree of protection		IP20		IP20	
Weight		80g		370g	
<b>CERTIFICATIONS AND COMPLIANCE</b>					
Reference standards		EN61000-6-4/2006 + A1 2011; EN64000-6-2/2005 ; EN61010-1/2010		EN61000-6-4/2006 + A1 2011; EN64000-6-2/2005 ; EN61010-1/2010	

## MOUNTING

The EMT-1C can be mounted in any position (see photo below), horizontal or vertical mounting, horizontal or vertical through the two hooks for DIN rail included in the box.



# EMT-1C/50 | 1C/300

## DIGITAL MEASURING INSTRUMENTS MODULAR MEASUREMENT TRANSDUCER

### EMT-1C/50

The EMT-1C/50 is a Single-phase Power meter able to measure TRMS Current AC/DC, and Voltage.

On the RS485 Modbus are available : Irms, Vrms, Watt, Var, Va, Vpk, Ipk, Frequency, Cosφ, Energy bidirectional and THD.  
The device is fully configurable by RS485.

#### CHARACTERISTICS:

- TRMS Measure, THD available
- 0,5 % Accuracy
- RS485 Modbus integrated
- Bidirectional Energy metering
- Din rail mounting in both side
- Fully configurable by interface software
- Bootloader for updating firmware

### EMT-1C/50 LV

The EMT-1C/50-LV is the LOW VOLTAGE version of the Single-phase Power meter EMT-1C/50, able to measure the RMS AC or DC Current and Voltage.  
On the RS485 Modbus are available:

Irms, Vrms, Watt, Var, Va, Vpk, Ipk, Frequency, Cosφ, Energy bidirectional and THD.  
The device is fully configurable by RS485.

#### CHARACTERISTICS:

- LOW VOLTAGE VERSION
- TRMS Measure, THD available
- 0,5% Accuracy;
- RS485 Modbus integrated;
- Bidirectional Energy metering
- Din-rail mounting in both side
- Fully configurable by interfacesoftware
- Available measure register: MSW first, LSW first or hundredts

### EMT-1C/300

The EMT-1C/300 is an Energy / Power Meter capable of measuring single-phase current and voltage AC RMS/ DC.  
RS485 Modbus with over 200 registers.

Measure available: Irms, Vrms, Watt, Var, Va, Vpk, Ipk, Frecuenza, Cosφ, Import/Export energy, THD, min/MAX of RMS measurement.

Suitable for measurements with varying frequencies (Wind, Hydro, Shipbuilding Industries, Aviation), Telecommunication applications, Refrigeration, Motors.  
Suitable for direct measurements between inverter and motor.

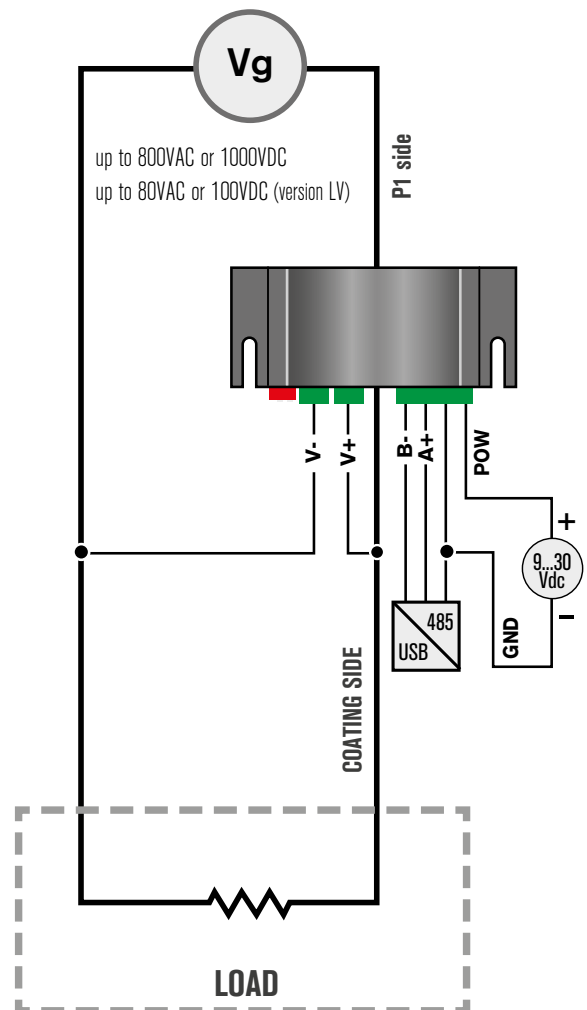
### EMT-1C/300 LV

The EMT-1C/300-LV is the LOW VOLTAGE version of the Energy / Power Meter EMT-1C/300, capable of measuring single-phase current and voltage AC/DC TRMS.

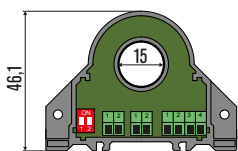
RS485 Modbus with over 200 registers.

Measure available: Irms, Vrms, Watt, Var, Va, Vpk, Ipk, Frecuenza, Cosφ, Import/Export energy, THD, min/MAX of RMS measurement.

#### WIRING DIAGRAMS EMT-1C/50 E EMT-1C/300



#### MECHANICAL DIMENSIONS EMT-1C/50



#### MECHANICAL DIMENSIONS EMT-1C/300

