

EnergOM 1000 Multi-channel Power Monitor

The EnergOM 1000 Series provides a compact and robust metering solution, enable reliable monitoring of building electrical loads with a low installation cost-per-point by combining sub-metering. The unit performs real-time metering, measures energy consumption and monitors power quality for max 18 channel circuits for single phase or 6 channel for three phase circuits.

Advanced communications options including Modbus via RS485, I/O communications provide for extensive reliable data exchange. Multiple units can be connected together to meter unlimited number of circuits. The versatility of EnergOM 1000 meters are ideal for multi-tenant or departmental metering applications within office towers, condominiums, apartment buildings, shopping centers and other multi-user environments.

Main Features

- Class 0.5 measurement accuracy
- 6 channels 3P4W / 3P3W or 18 channel 1P2W metering
- Current measuring .../5 or .../1 A
- Standard 35mm - 8 module DIN rail mounting
- Provide RS-485 MODBUS-RTU Communications
- Optional 6DI / 2DO for signal detect and remote control
- Optional external connection LCD screen, 72*72mm panel mount
- Accept customization design



Production standards

- **Reference standard:**
 - Basic electricity: IEC 61557-12:2007
 - Active energy: IEC 62053-22:2003
 - Reactive energy: IEC 62053-23:2003
- **LVD test standard:**
 - IEC/EN 61010-1:2010
- **EMC Test**
 - Electrostatic discharge immunity test: IEC-61000-4-2 level 4
 - Electrical fast transient burst immunity test: IEC61000-4-4 level 3
 - Surge (Shock) immunity test: IEC61000-4-5 level 4

Measurement Parameter

Current measurement on inputs (TRMS)	Energom 1300	Energom 1100
CT secondary 1 and 5 A		1 or 5 A
Measurement range		0 ... 11 kA
Input consumption		<0.1 VA
Voltage measurement (TRMS)		
Direct measurement	18 ... 400 VAC L-L	18 ... 220 VAC L-N
PT secondary	100VAC / 400VAC	220VAC
Frequency		45 ... 65 Hz
Input consumption		<0.1 VA
Auxiliary power supply		
AC voltage	DC/AC 85~265 ± 10 %, 50 / 60 Hz	
Consumption	< 10 VA	
Measurement value		
Basic electrical parameter	Voltage (U) , Current (I) @ 0.2% accuracy Power (P, Q, S) @ 0.5% accuracy Power factor (H) , Frequency (Hz) @ 0.1% accuracy	
Active Energy (according to IEC 62053-22)	Consumped (Ep+) , generated (Ep-) @ 0.5% accuracy	
Reactive Energy (according to IEC 62053-23)	Consumped (Eq+) , generated (Eq-) @ 2.0% accuracy	
Outputs (alarms / control)		
Number of relays	2 channel DO & 6 channel DI	
Type	230 VAC 5 A	
Communication		
Link	RS485 (2/3 wires half duplex)	
Protocol	Modbus RTU mode	
MODBUS speed	4800/9600bauds	

Typical Wiring (with LCD screen)

