

# Energom-94-J

Smart Power Monitor  
Three phase for panel mounting

## Description

New series Smart Power Monitor is the more powerful meter than series power analyzer. With higher precision and more measurement parameters.

Standard RS485 communication structure, MODBUS-RTU protocol, optional profibus-DP protocol. In different project requirement, also support choose RJ45 Ethernet port (MODBUS-TCP)

## Features

- PMD measurement accuracy class 0.2
- Current measuring .../5 or .../1 A
- Backlit LCD display
- Universal series power supply (85-265VAC/DC)
- Record and read multi- tariffs ratio, Up to 3 months
- 31th individual harmonic
- A variety of advanced electrical parameters can display the status of the power grid on the spot (Max demand/unbalance/crest factor/K factor...)
- Provide max 50 lists SOE record function
- With RS-485 Modbus/RTU Communications
- With 2 channel Pulse Output (PO) for active energy&reactive energy counting
- Optional 2 channel Analog Output (AO)
- Optional 4 channel Digital Input (DI) and 2 channel Digital Output (DO)



## Technical characteristics

|   |  |
|---|--|
| <b>Current measurement on inputs (TRMS)</b>       |  |
| CT secondary                                      | 1 or 5 A                                     |
| Measurement range                                 | 0 ... 11 kA                                  |
| Input consumption                                 | <0.1 VA                                      |
| <b>Voltage measurement (TRMS)</b>                 |  |
| Measurement range                                 | 18 ... 400 VAC                               |
| PT secondary                                      | 100VAC/400VAC                                |
| Frequency   | 50 / 60 Hz                                   |
| Input consumption                                 | <0.1 VA                                      |
| <b>Electrical power measurement (IEC61557-12)</b> |  |
| Accuracy (V,I)                                    | 0.20%  |
| Accuracy (P,Q)                                    | 0.50%  |
| <b>Frequency measurement</b>                      |  |
| Measurement range                                 | 45 ... 65 Hz                                 |
| Accuracy  | ±0.02Hz                                      |
| <b>Energy accuracy</b>                            |  |
| Active energy                                     | Class 0.5s (IEC 62053-22)                    |
| Reactive energy                                   | Class 1.0 (IEC 62053-24)                     |
| <b>Auxiliary power supply</b>                     |  |
| AC voltage  | DC/AC 85~265 ± 10 %                          |
| Frequency   | 50 / 60 Hz                                   |
| Consumption                                       | < 10 VA                                      |
| <b>I/O port, configuration as ordering info</b>   |  |
| Optical outputs (PO)                              | 2* Pulse, 1600imp/kWh                        |
| Relay outputs (DO)                                | 2* 5A@250Vac / 5A@30Vdc                      |
| Status Inputs (DI)                                | 4* Dry contact                               |
| Analog output (AO)                                | 1* 4~20mA, load <390Ω, or 0~10V, load >100KΩ |
| Isolation   | 4kVac r.m.s                                  |
| <b>Communication</b>                              |  |
| Link  | RS485 (2/3 wires half duplex)                |
| Protocol  | Modbus RTU mode                              |
| MODBUS speed                                      | 4800/9600bauds                               |