

PQM-1000s

features



- True RMS Measurement
- Waveform Display for Voltage and Current
- Graphical Phasor Display
- Harmonics Spectrum Bar Graph Display
- 4 Quadrant Energy Measurement
- Demand for kW, kVA and Ampere (Max, Previous, Rolling)
- Info / Event Summary Page Display
- Phase Supply LED Indicator
- Phase Rotation Indication
- Complies with:
IEC 60255-27-Clause 10.6.4.2 / 4.3 ; EN 61326-1
- External Plug-in Module for RS-485 Modbus RTU
Model: A-01s / A-01sp (isolated type)

technical data

Network Type

3P4W, 3P3W, 3P3W (ARON) & 1P2W

Display Type

Graphical LCD with white LED backlit

Aux Power Supply

PQM-1000s-220a : 65 ~ 275 Vac (45 ~ 65 Hz),
90 ~ 300 Vdc
PQM-1000s-024d : 18 ~ 72 Vdc
Consumption : < 3VA

Current Measurement

AC Input Range : 0.005 ~ 6.500 A
Accuracy : $\pm 0.5\%$
CT Range : 0 ~ 10,000 / 5A (for model CT.../5A)
0 ~ 4,000 / 1A (for model CT.../1A)
Burden : < 0.1 VA at 5A

Voltage Measurement

AC Input Range : 0~300 VLN , 0~500 VLL
Accuracy : $\pm 0.5\%$
VT Range : 1.0 ~ 2500.0 : 1

Power Measurement

Accuracy (W, Var, VA, PF, Cos Φ) : $\pm 1.0\%$

Frequency Measurement

Range : 45 ~ 65 Hz
Accuracy : $\pm 0.1\%$

Energy Measurement (4 Quadrant)

Range : 0.0 ~ 9,999,999,999.9
(kWh, kVAh, kVAh)

Mechanical

Operating Temp. : -5°C ~ +55°C
IP Rating : IP54 (front panel)
Installation : Panel flush mount
Dimension (mm) : 99.2 (h) x 99.2 (w) x 45 (d)
Weight : approx. 310 gram

measured parameters

Voltage : V1, V2, V3, V12, V23, V31, V asymmetry

Current : I1, I2, I3, In

Power : P1, P2, P3, ΣP

Reactive Power : Q1, Q2, Q3, ΣQ

Apparent Power : S1, S2, S3, ΣS

Active Energy : Import and Export (kWh)

Reactive Energy : Inductive and Capacitive (kVAh)

Apparent Energy : (kVAh)

Frequency : Hz

True Power Factor : PF1, PF2, PF3, PFavg

Displacement Power Factor:

Cos Φ 1, Cos Φ 2, Cos Φ 3, Cos Φ avg,
360° phasor angle measurement for
V1, V2, V3, I1, I2, I3, In

Max / Roll / Prev. Demand :

I1, I2, I3, Iavg, P1, P2, P3, ΣP , S1, S2, S3, ΣS

Harmonics:

1st to 31st (odd harmonics) for Voltage and Current

Total Harmonic Distortion : Voltage and Current

Min/Max events (V, I, thd-V, thd-I & P) with elapsed time for max

k-Factor measurement for Ampere :

kF1, kF2, kF3 (indicative)

Running Hours

Hour Run

communication

A-01s / A-01sp Plug in module
(sold separately)

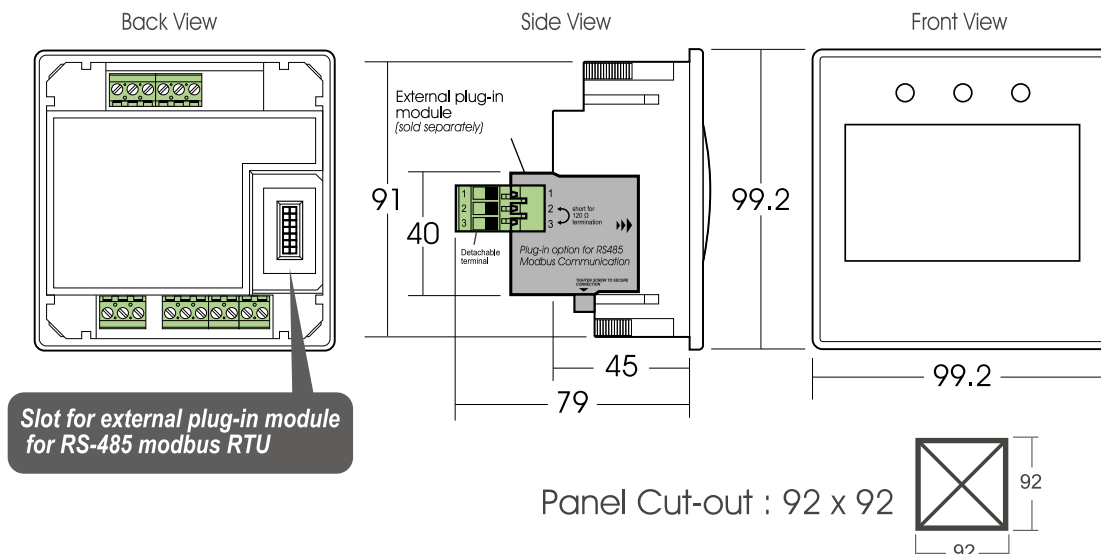
Modbus RTU RS-485 (isolated type) with :-

i) Modbus Address : 1 ~ 247

ii) Baud rate (kbps) : 0.3, 0.6, 1.2, 2.4, 4.8, 9.6, 19.2, 38.4

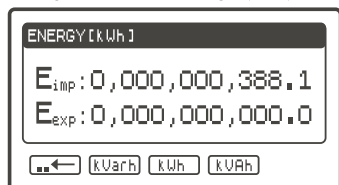
iii) Parity : None / Odd / Even

casing dimension

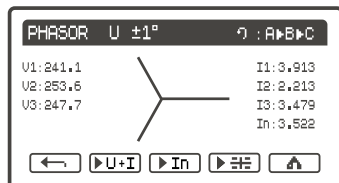


page display sample

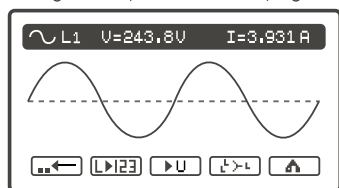
energy parameters page (kWh)



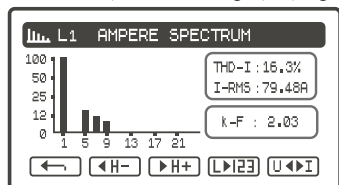
phasor angle definition page



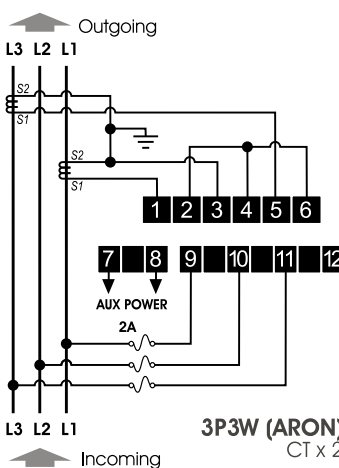
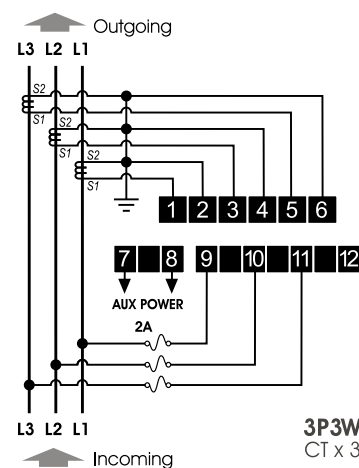
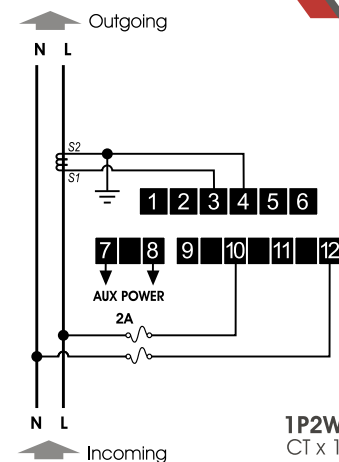
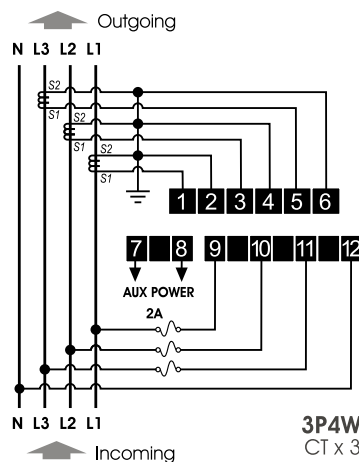
voltage & ampere waveform page



harmonic spectrum bar graph page



wiring diagram



ordering information

Model

PQM-1000s-220a-5A
PQM-1000s-220a-1A
PQM-1000s-024d-5A
PQM-1000s-024d-1A

Description

(CT.../5A) 65 ~ 275 Vac (45~65 Hz), 90~300 Vdc
(CT.../1A) 65 ~ 275 Vac (45~65 Hz), 90~300 Vdc
(CT.../5A) 18 ~ 72 Vdc
(CT.../1A) 18 ~ 72 Vdc

Note: All measurement in mm.