



User Guide

PQM-1000s

Digital Power Quality Network Analyzer

features

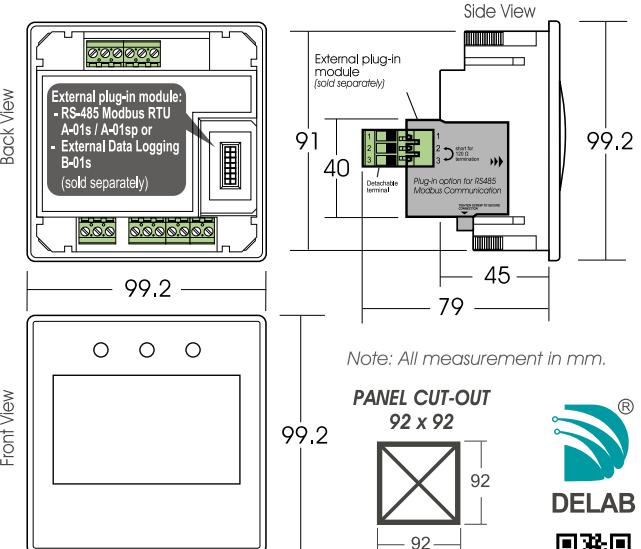
- True RMS Measurement
- Waveform Display for Voltage and Current
- Graphical Phasor Display
- Harmonics Spectrum Bar Graph Display
- 4 Quadrant Energy Measurement
- Demand for kW, kVA and Ampere (Max, Previous, Rolling)
- Info / Event Summary Page Display
- Phase Supply LED Indicator
- Phase Rotation 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)

External Data Logging Module
Model: B-01s (micro SD card / max. storage capacity 32GB)
(Compatible only with firmware version 2.0.02 onwards)

: Delab Scientific Sdn. Bhd.

Casing Dimension



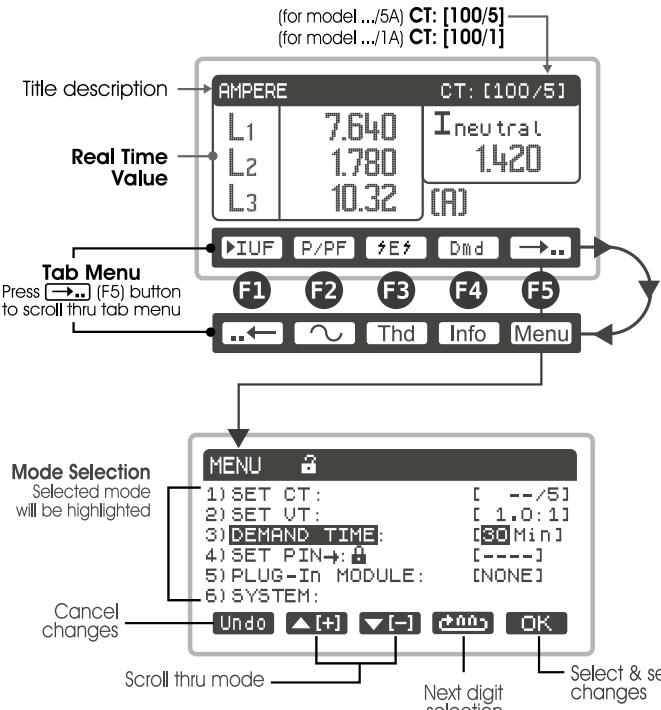
Note: Specification subject to change without prior notification
(please visit www.delab.com.my for latest specification)

Menu Page

Set CT, VT, Demand Time, Pin Lock, Plug-in Module & System

At Home page:

Press (F5) button to scroll thru tab menu for **Menu** tab
then press (F5) button to enter Menu mode.



Setting Range

- Set CT Primary

0 ~ 10,000 / 5 (A) : For model CT.../5A
0 ~ 4,000 / 1 (A) : For model CT.../1A
- Set VT

1.0 ~ 2500.0 : 1

- Set Demand Time

10 ~ 60 mins

- Set Pin Lock

0000 ~ 9999 (4 digits)

- Plug-In Module

A-01 (RS-485 modbus RTU)	B-01 (Data Logging)
Selectable as: None / A-01 / B-01	Date (D / M / Y)
	Baud rate : 0.6 ~ 38.4 kbps
	Parity : None / Odd / Even
	Log Interval: 10 ~ 3600 sec.
	(press SAVE)
	Format SD card : Yes / No
- System(->press OK)

Backlit : Auto / 1 ~ 7
Contrast : 0 ~ 15
Phase Fail LED : Flash / Off
Factory Reset : Yes / No

Note : All modes exit automatically if left untouched for more than 20 secs.

Technical Data

Aux Power Supply

Model (220a) : 65~275 Vac,
90~300 Vdc
Model (024d) : 18~72 Vdc
Consumption : < 3VA

Current Measurement

AC Input Range : 0.005~6,500 A
Accuracy : ± 0.5 %
CT Range : 0~10,000 / 5A
0~4,000 / 1A
Burden : < 0.1 VA at 5A

Voltage Measurement

AC Input Range : 0~300 VLN
0~500 VLL
Accuracy : ± 0.5 %
VT Range : 1.0 ~ 2500.0:1

Power Measurement

W, VAr, VA, PF, Cos ϕ
Accuracy : ± 1.0 %

Frequency Measurement

Range : 45~65 Hz
Accuracy : ± 0.1 %

Energy Measurement (4 Quadrant)
Range : 0.0 ~ 9,999,999,999.9
(kWh, kVarh, kWh)

Network Type

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

Display Type

Graphical LCD with white LED backlit

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

Communication

A-01s / A-01sp Plug in module
Modbus RTU RS-485 (isolated type)

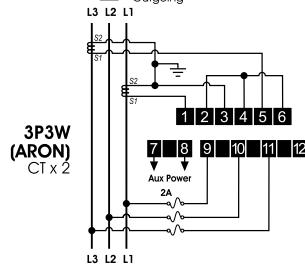
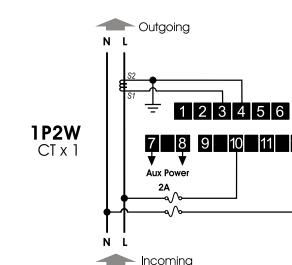
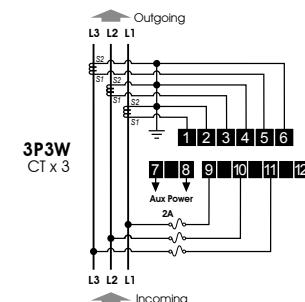
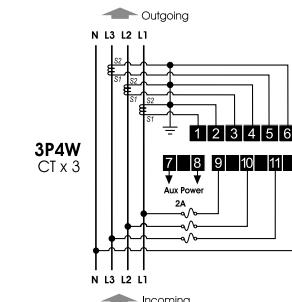
Selectable address: 1~247

Selectable baud rate (kbps):

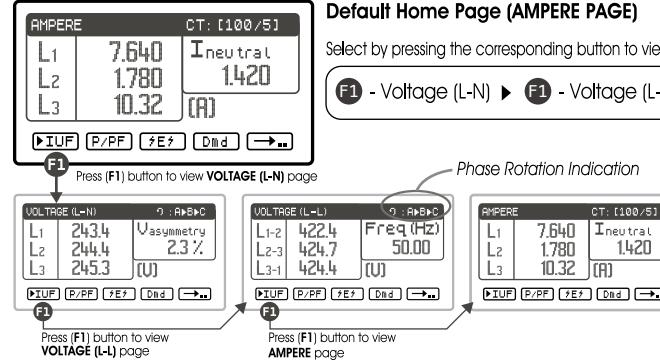
0.6, 1.2, 2.4, 4.8, 9.6, 19.2, 28.8, 38.4

Selectable parity: None / Odd / Even

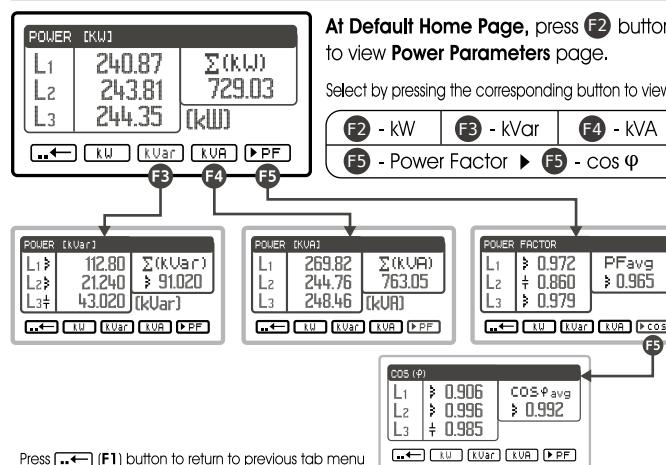
Wiring



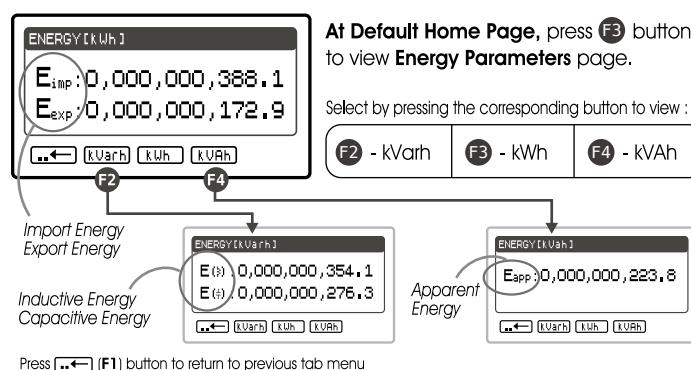
►IUF Default Home Page - Ampere Page



P/PF Power Parameters - kW, kVar, kVA, PF, cosφ



⚡ Energy Parameters - kWh, kVahr, kVAh

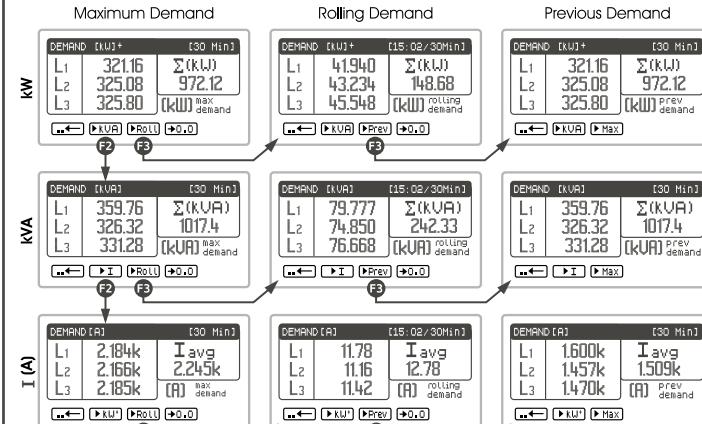


Dmd Demand Parameters for kW, kVA & Ampere (Max, Rolling, Previous)

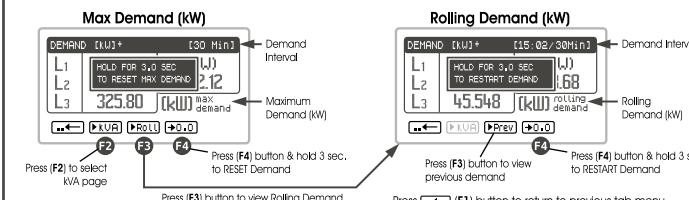
At Default Home Page, press F4 button to view Demand Parameters page.

Select by pressing the corresponding button to view,

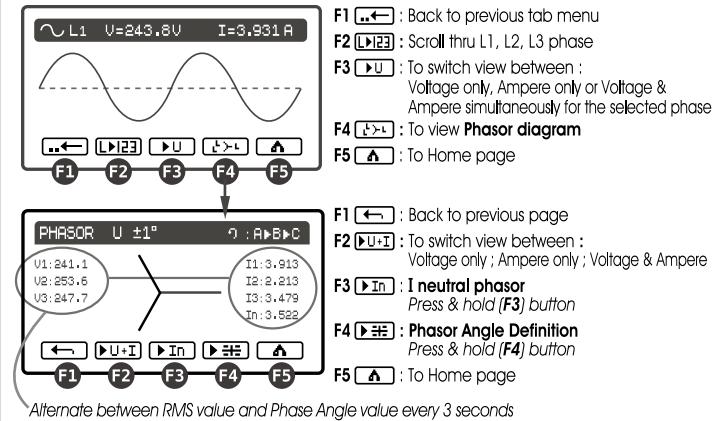
F2 - kVA ► F2 - I (A) ► F2 - kW
F3 - Roll ► F3 - Previous ► F3 - Max
F4 - 0.0 (Reset / Restart Demand)



To reset Max Demand / To restart Rolling Demand
Press F2 button to select page (kVA / I (A) / kW)



Voltage & Ampere Waveform Page



Thd Total Harmonic Distortion Page

