



- True RMS Measurement
- 4-digits Segment Display
- Real Time Display (for each phase) :-
  - Current (I)
  - Voltage (V)
  - Frequency (Hz)
  - True Power Factor (PF)
  - Displacement Power Factor (Cos  $\phi$ )
  - Active Power (P)
  - Reactive Power (Q)
  - Apparent Power (S)

Default View Mode Selection

Auto / Manual Scroll for L1, L2 & L3

Alarm LED Indication :- (Activated by A-02s)

- Adjustable Over / Under Current Setting
- Adjustable Over / Under Voltage Setting
- Adjustable Over / Under Frequency Setting
- Adjustable PF / Cos  $\phi$  Setting
- Adjustable Start / Reset Time Delay

External Plug-in Module for :-

A-01s (RS-485 Modbus RTU) *isolated type*

A-02s (RS-485 Modbus RTU + Alarm Output) *isolated type*

## technical data

### Network Type

3P4W, 3P3W & 1P2W

### Display Type

4-digits 7 Segment Display

### LEDs Indication

A, V, Hz, PF, Cos  $\phi$ , kW, kVA, kVAR

### Aux Power Supply

AC range : 65 ~ 275 Vac, 45 ~ 65 Hz

DC range : 90 ~ 300 Vdc

Consumption : < 3VA

### Current Measurement

AC Input Range : 0.025 ~ 10.0 A

Accuracy :  $\pm 1.0\%$

CT Range : 5 ~ 10,000 / 5A

Burden : < 0.1 VA at 5A

### Voltage Measurement

AC Input Range : 0~300 VLN, 0~500 VLL

Accuracy :  $\pm 1.0\%$

### Power Measurement

Accuracy (W, VAR, VA, PF, Cos  $\phi$ ) :  $\pm 1.0\%$

### Frequency Measurement

Range : 45 ~ 65 Hz

Accuracy :  $\pm 0.1\%$

### 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. 265 gram

## measured parameters

**Voltage** : V1, V2, V3, V12, V23, V31

**Current** : I1, I2, I3, In

**Active Power** : P1, P2, P3,  $\Sigma P$

**Reactive Power** : Q1, Q2, Q3,  $\Sigma Q$

**Apparent Power** : S1, S2, S3,  $\Sigma S$

**Frequency** : Hz

**True Power Factor** : PF1, PF2, PF3, PFavg

**Displacement Power Factor**:  
Cos  $\phi$  1, Cos  $\phi$  2, Cos  $\phi$  3, Cos  $\phi$  avg

**Alarm** : Off / Under / Over Current  
Off / Under / Over Voltage  
Off / Under / Over Frequency  
Off / Low PF / Low Cos  $\phi$   
Start / Reset Time Delay

**Operated Hours**

Hour Run

## communication

**A-01s & A-02s** Plug in module (*sold separately*)

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

i) Modbus Address : 1 ~ 247

ii) Baud rate (kbps) : 3, 6, 12, 24, 48, 96, 192, 288

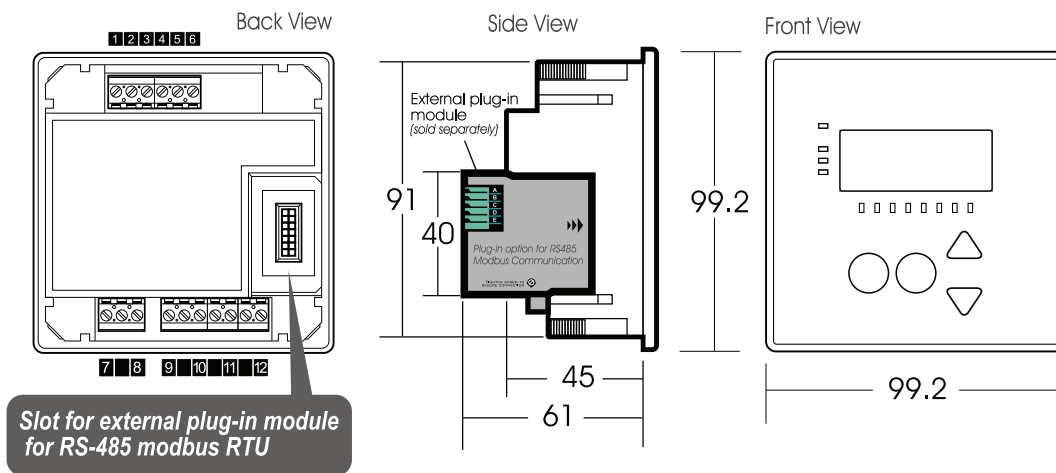
iii) Parity : none, odd, even

## (programmable alarm) external output

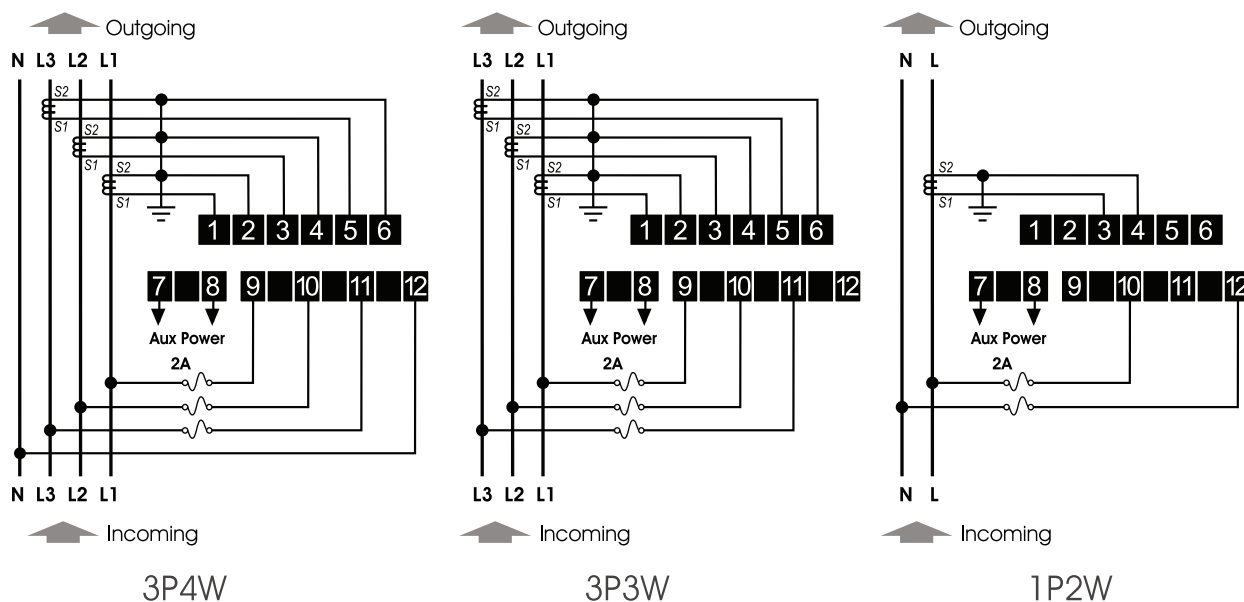
**A-02s** Plug in module (*sold separately*)

Modbus RTU RS-485 (*isolated type*) with external alarm output only

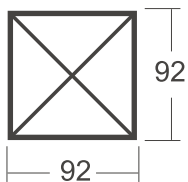
## casing dimension



## wiring diagram



## panel cut-out



Panel Cut-out : 92 x 92

## ordering information

Model	Description
DM-50	65 ~ 275 Vac (45~65 Hz) 90~300 Vdc

Note: All measurement in mm.