

## **Overview Setting Menu:**

This is the overview setting menu after you have pressed SET buttons for 5 seconds:

Item	Level 1	Level 2	Level 3	Description
1.1	SET	disp	0 to 10	Set main display page. Default = 0.
1.2		Clr.E	-	Clear Energy Values
1.3		L-bL	Off / On	Constantly turn On LED backlight or Off (power saver – after 1 minute). Default = Off.
1.4	INP	NET	N.34 / N.33	Change electrical network between 3 phase 3 wires or 3 phase 4 wires. Default = N.34.
1.5		U.SCL	400 / 100 V	Change voltage measurement 400 V (direct) or 100 V (with VT). Default = 400.
1.6		I.SCL	5 / 1 A	Change current measurement up to 5A or 1A. Default = 5.
1.7		PT	1 to 9999	Is the Voltage Transformer Ratio. Example: 11000V/110V = 100 Default = 1.
1.8		CT	1 to 9999	Is the Current Transformer Ratio. Example: 200A/5A = 40 Default = 1.
1.9	CONN	ADDR	1 to 247	Change the DPM address for Modbus communication. Default = 001.
1.10		BAUD	2400 / 4800 / 9600	Change the Baud Rate for Modbus communication. Default = 9600.
1.11	DO-1	Address (0-250)	0 to 9999	Default = 1000.

### **Key functions:**

- 1) SET key = enter / confirm
- 2) Up key = increase / next page
- 3) Down key = decrease / previous page
- 4) Left key = return

### **Main Display Page setting (Select which parameter to be shown on 1st page):**

NUMBER 0 U (voltage)	NUMBER 1 I (current)	NUMBER 2 P (Real / True Power)
NUMBER 3 Q (Var / Reactive Power)	NUMBER 4 S (VA / Apparent power)	NUMBER 5 F cos $\Theta$ (Frequency)
NUMBER 6 cos $\Theta$ (Power Factor)	NUMBER 7 SPQ (Net True Power, Reactive Power, Apparent Power)	NUMBER 8 U (Phase to phase Voltage)
NUMBER 9 DIDO (DIGITAL IN/OUTPUT)	NUMBER 10 Auto Swap every 5 seconds	

- 1) Press & Hold SET Key for 5 seconds
- 2) Select (up/down key), Code 0001 & press SET key
- 3) Select SET & press SET key.
- 4) Select DISP & press SET Key.
- 5) Select (up/down) for desired value & press Left key few times until you see SAVE YES
- 6) When SAVE YES on screen, press SET key to SAVE or press Left key to cancel & exit.

Note: on main page, shows kWh (Real / True Energy) + / - (2 direction) & kVARH (Reactive Energy) + / - (2 direction). Use Left Key to swap between selections.

## **Reset Energy Values**

- 1) Press & Hold SET Key for 5 seconds
- 2) Select (Up/down key), Code 0001 & press SET key
- 3) Select SET & press SET key.
- 4) Select Clt.E & press SET Key.
- 5) Press Left key until you see SAVE YES
- 6) When SAVE YES on screen, press SET key to SAVE or press Left key to cancel & exit

## **Change Grid Network Format Settings: 3 phase 3 wires / 3 phase 4 wires:**

- 7) Press & Hold SET Key for 5 seconds
- 8) Select (Up/down key), Code 0001 & press SET key
- 9) Select Inp by pressing Up/Down key & press SET key
- 10) Select NET by pressing Up/Down key & press SET key
- 11) Select n.33 (for 3 phase 3 wires) or n.34 (for 3 phase 4 wires – by default) & press Left key few times until you see SAVE YES.
- 12) When SAVE YES on screen, press SET key to SAVE or press Left key to cancel & exit.

## **Change Ratio of CT (Current Transformer):**

- 1) Press & Hold SET Key for 5 seconds
- 2) Select (Up/down key), Code 0001 & press SET key
- 3) Select Inp by pressing Up/Down key & press SET key
- 4) Select Ct by pressing Up/Down key & press SET key
- 5) By default CT = 1 means measuring 5A. If using CT rating of 150A, key in value  $150A/5A = 30$
- 6) Select (up/down) for desired value & press Left key few times until you see SAVE YES
- 7) When SAVE YES on screen, press SET key to SAVE or press Left key to cancel & exit.

## **Change Ratio of VT (Voltage Transformer):**

- 1) Press & Hold SET Key for 5 seconds
- 2) Select (Up/down key), Code 0001 & press SET key
- 3) Select Inp by pressing Up/Down key & press SET key
- 4) Select Pt by pressing Up/Down key & press SET key
- 5) By default Pt = 1 means measuring 110V.
- 6) Warning: If measure high voltage you cannot directly connected power line to Digital Power Meter! If measure high voltage such as 11kV, you need a voltage transformer for each phase to step down to safe voltage. If using VT rating of 11kV/110V, key in value  $11kV/110V = 100$
- 7) Select (up/down) for desired value & press Left key few times until you see SAVE YES
- 8) When SAVE YES on screen, press SET key to SAVE or press Left key to cancel & exit.

### **Change Device Address (Default address: 001):**

- 1) Press & Hold SET Key for 5 seconds
- 2) Select (Up/down key), Code 0001 & press SET key
- 3) Select Conn by pressing Up/Down key & press SET key
- 4) Select Addr by pressing Up/Down key & press SET key
- 5) Select (up/down) for desired address & press Left key few times until you see SAVE YES
- 6) When SAVE YES on screen, press SET key to SAVE or press Left key to cancel & exit.

### **Change Device Baud Rate (Default baud rate: 9600):**

- 1) Press & Hold SET Key for 5 seconds
- 2) Select (Up/down key), Code 0001 & press SET key
- 3) Select Conn by pressing Up/Down key & press SET key
- 4) Select Baud by pressing Up/Down key & press SET key
- 5) Select (up/down) for desired Baud Rate (2400/4800/9600) & press Left key few times until you see SAVE YES
- 6) When SAVE YES on screen, press SET key to SAVE or press Left key to cancel & exit.

### **Add Relay Switch (DO) Alarm Settings:**

- 1) Press & Hold SET Key for 5 seconds
- 2) Select (Up/down key), Code 0001 & press SET key
- 3) Select do-1 by pressing Up/Down key & press SET key
- 4) Values 000 shows. This value represents function key below:

001 - 1 <sup>st</sup> phase High voltage alarm	003 -2 <sup>nd</sup> phase High voltage alarm	005 -3 <sup>rd</sup> phase High voltage alarm
002 -1 <sup>st</sup> phase Low voltage alarm	004 -2 <sup>nd</sup> phase Low voltage alarm	006 -3 <sup>rd</sup> phase Low voltage alarm
007 -1 <sup>st</sup> phase High current alarm	009 -2 <sup>nd</sup> phase High current alarm	011 -3 <sup>rd</sup> phase High current alarm
008 -1 <sup>st</sup> phase Low current alarm	010 -2 <sup>nd</sup> phase Low current alarm	012 -3 <sup>rd</sup> phase Low current alarm

- 5) Select (Up/down key), after set function key, press SET key
- 6) For Current setting it is calculate by Ratio. For example alarm at 240A for a 300/5A CT, key in value  $800 = (240/300 \times 1000)$ . Select (Up/down key) to increase or decrease value.
- 7) For Voltage setting it is calculate by Ratio (phase to phase voltage). For example alarm at 300V, key in value  $750 = (300/400 \times 1000)$ . Select (Up/down key) to increase or decrease value.
- 8) After press Left key few times until you see SAVE YES
- 9) When SAVE YES on screen, press SET key to SAVE or press Left key to cancel & exit.