nano sensorics

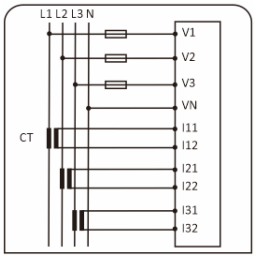
PowerSense Sub-Meter short start instruction

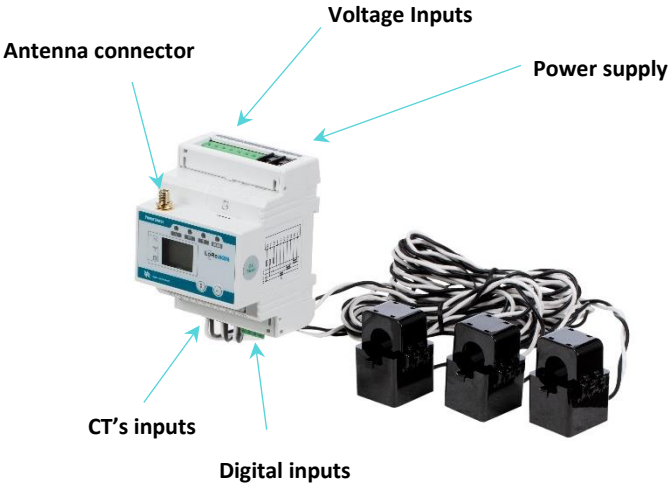
Ver.: 2024-02-12

Description

The **"PowerSense"** is advanced technology DIN rail 3-phase LoRaWAN meter applied for the full measurement electric energy consumption, power factor, tariffs and other electric properties in order to ensure energy monitoring, management and sub-metering.

Primary basic wiring schematics [schematics also indicated on the device] and inputs:





Front Buttons explanation:

<▼>	
Data Display Mode	The **Primary Display** shows the kWh Import measurement under the **Energy** menu. Pressing this button scrolls through the available measurements in this menu.
Setup Configuration Mode	Before an item is selected, pressing this button scrolls to the next setup parameter. If the selected parameter is a numeric value, pressing this button increments the selected digit. If the selected parameter is an enumerated value, pressing this button scrolls through the selection list.
<↩>	
Setup Configuration Mode	Pressing this button for two seconds toggles between **Primary Display** mode and **Setup Configuration** mode. Once inside the **Setup Configuration** mode, pressing this button selects a parameter for modification. Once selected, the parameter value blinks while it's being changed. If the selected parameter is a numeric value, the cursor is at the right most digit by default. Pressing this button moves the cursor one position to the left. If the cursor has reached the left most digit, pressing this button again will save the current numeric value into memory.

UAB " Nano sensorics"
Pakaunės g. 70, LT-47243 Kaunas
www.nanosensorics.com
info@nanosensorics.com

How meter connects to LoRaWAN:

- The DevEUI information can be found on a label underneath the Front Panel. Onboard meter to your custom platform by the keys provided and meter will send data every 15 minutes automatically.

Setup Parameters [basic]:

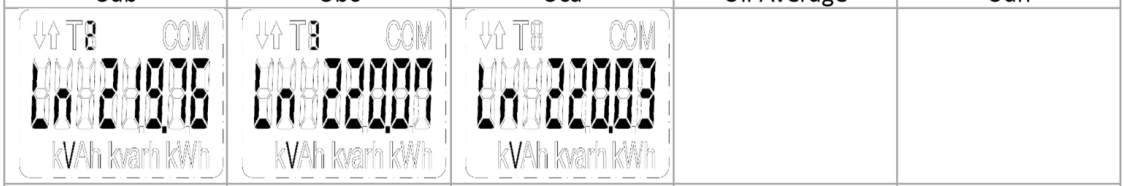
Menu	Parameters	Description	Range/Options	Default
PW	Password	Enter Password	0 to 9999	“0”
PT1	PT Primary	PT Primary	1 to 1,000,000 V	380 V
PT2	PT Secondary	PT Secondary	1 to 690V	380 V
CT1	CT Primary	CT Primary	1 to 30,000A	5 A
CT2	CT Secondary	CT Secondary	1 to 5A	5 A
ID	Meter Address	Meter Address	1-247	100

Primary Display

Primary Display that shows the kWh Imp parameter as shown below. The user can use the <▼> button to scroll and display other parameters. If there is no Front Panel activity for 25 seconds or longer, the LCD will return to the Primary Display.

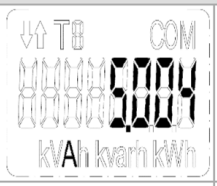
The following table illustrates the available measurements in the Primary Display mode. Depending on the Wiring Mode selected, certain measurements may not be available.

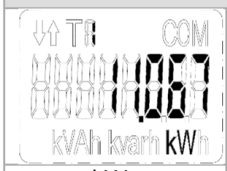
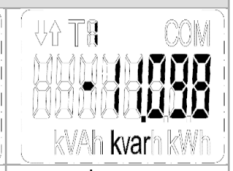
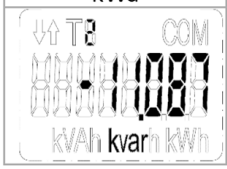
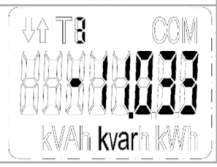
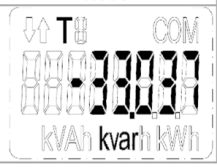
In Primary Display mode, pressing <▼> button scrolls to the next parameter. Pressing <↩> at any time while in Primary Display mode has no effect on the display.

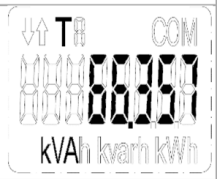
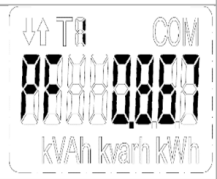
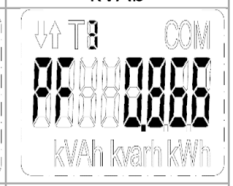
Energy				
kWh Import	kWh Export	kvarh Import	kvarh Export	kVAh
Voltage				
Uab	Ubc	Uca	Ull Average	Uan
				
Ubn	Ucn	Uln Average		

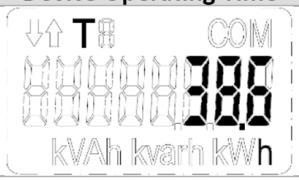
UAB “ Nano sensorics”
Pakaunės g. 70, LT-47243 Kaunas
www.nanosensorics.com
info@nanosensorics.com

nano sensorics

Current				
				
Ia	Ib	Ic	I Average	

Power				
				
kWa	kWb	kWc	kW Total	kvara
				

kvarb	kvarc	kvar Total	kVAa	kVAb
				
kVAc	kVA Total	PFa	PFb	PFc
PF Total	Frequency			

Device Operating Time


UAB " Nano sensorics"
Pakaunės g. 70, LT-47243 Kaunas
www.nanosensorics.com
info@nanosensorics.com