

## EMM.530C

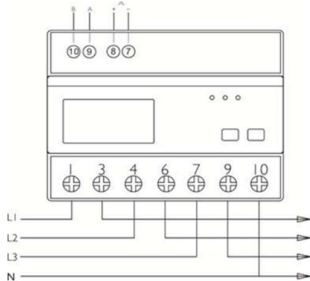


The EMM.530C is the combination of an advanced 3-phase+N energy meter with direct connection up to 3x 100A +N and a built-in 3-pole power relay up to 3x100A.

The configuration of the meter is done via the push button and the LCD display. The bi-directional meter (import and export) is suitable for both active and reactive power measurement. The reading of the consumption values can be done via the display or via the

connected web server. In addition to an RS485 connection, the module also has 1 pulse output.

### 1. Connect:



#### Nutrition:

- L1 in on Terminal 1, L1 out on Clip 3
- L2 in on Terminal 4, L2 out on Terminal 6
- L3 in on Clip 7, L3 out on Clip 9
- N in/out on terminal 10

**Modbus:** A to small terminal 9, B to small terminal 10

**Pulse:** + on small terminal 7, + on small terminal 8

### 2. Configuration on the display:

This module is partly pre-configured, normally only a **UNIQUE** Modbus address needs to be provided, number between 1... 247 but also check the other Modbus parameters.

#### How to get into SETUP:

Keep **pressing the right button (enter) until PAS 0000** appears, enter default password **PAS 1000** by pressing the **left button (scroll)** until 1 appears, short **press enter for next number or long press enter** to go to next setting. Go through the set values via scroll. After waiting a few seconds, you will automatically exit the menu. The pre-set Modbus parameters: 9600 8N1

- Modbus address : Id001.. Id247 (default 1)
- Baud rate: b 9600 (default 9600)
- 8 bit
- Parity: Prty n (parity none) (default n)
- Stopbit 1(default 1)

So if there are multiple meters in the installation, you have to set a unique Modbus address via this display (Id001.. Id247 (default 1)) for each meter.

### 3. Configuration in the web server

#### MEMo3b:

In the webserver go to Level3 (installer level), click on the button "EDIT GROUP-CHANNELS" enter the word 'Level3' and press the button 'CANCEL', you will now see 'Level3' at the top left. In this installers Level3 you can add meters.

For the configuration in the MEMo3b, please refer to the Memo manual > v1.3 point 9b. Under an example with CH16=phase 1+import, Enter: module=EMM220-630, mode= Bistable, Modbus address and sub address, name and then 'SAVE'

CH 16	EMM220-630	Bistabel	VOLT	CURRENT	POWER	VA	PF	kWh	kWh
ADR/CH	DAG	MAAND	OFF	0.00 A	0.00 W	0.00 VA	0.00	0.00 kWh	0.00 kWh
GENERATE RT			0	0	0	0	0	0	0
TEST RX			0	0	0	0	0	0	0
SAVE			LOAD	16	EMM530c				

### 4. Reading values on the display

By briefly pressing the **scroll** push button each time, you can read all measured values and Modbus parameters:

Total kWh→ Import kWh→Export kWh→ Total kvarh→Import kvarh→ Export kvarh→ L1L2L3Voltage → L1L2L3 Current→ L1L2L3 Power→ L1L2L3 Total Power Factor →Frequency → Modbus Address→Baudrate→Parity→Pulse rate

### 5. What values are logged.

MEMo logs every 60 seconds:

- Meter reading import in kWh
- Meter reading Export in kWh
- Voltage in Volts
- Current in Amperes
- Power in Watts
- Power factor
- Reactive power Var

### 6. General remark:

- The current meter readings import and export can be read in the web server (light green values).
- The EMM.530C module is only suitable for a **3x380V+N**
- If you want to see both import consumption and export consumption, enter sub-address 0,1 and 2 in the web server Modbus, import graph is then under sub-address 0 and export under sub-address 1. For the channel with relay you choose MODE 'BISTABLE' for the other channels you choose MODE 'COUNTER'
- Visualization of the channels for the customer: see WS.503 webserver configuration/channels. Since the web server cannot show negative graphs, the solar panel E-meter must be connected according to the direction of the current.
- Manual operation can be done from the web server with an on/off button and not via the display on the module.

3F BUDGETMETER				
F1-IMPORT+RELAY	Modbus	Import	Export	Limit
	0 W	0.00 kWh	0.00 kWh	LIT AAN
F2-EXPORT	Modbus	Import	Export	Limit
	0 W	0.00 kWh	0.00 kWh	
F3	Modbus	Import	Export	Limit
	0 W	0.00 kWh	0.00 kWh	

- Automatic operation, e.g. as a budget meter, can be set via the visual logic user interface in the web server. In

the configuration below, the budget meter switches off for 10 minutes if more than 500 watts are consumed for 10 minutes, or switches off until the next hourly or day transition if hourly or daily consumption is exceeded, respectively.

VIEW LOGIC | REFRESH DATA | SAVE LOGIC | EXIT

CH18 Import + RELAIS LIMITER

- Timer = 10 0 min 0 D\_Output
- P Max > 500 31 W Power
- HC Max > 2000 5 Wh Hour Consumption
- DC Max > 10000 0.00 kWh Day Consumption

CH18 Import + RELAIS RELAY INVERS

- The comprehensive manual with all technical specifications, detailed configuration, Modbus registers is available via our website [www.2-wire.net](http://www.2-wire.net)

## 7. Installation instructions

Installation must be carried out by a certified installer and in accordance with the regulations in force. The module must be built into a fireproof fuse box. During installation, the following must be taken into account (non-exhaustive list):

- the applicable laws, standards and regulations.
- the state of the art at the time of installation.
- This manual, which only mentions general provisions and should be read in the context of each specific installation.
- the rules of good workmanship.
- the specified specs in this manual, otherwise there is a risk of damage to the module.

This manual must be attached to the electrical installation file. On the 2-Wire website you can always find the most recent manual of the product.

## 8. Support

Would you like to have the product repaired in case of a possible defect? Please contact your supplier or order "inspection module" online.

## 9. Warranty provisions

The warranty period is two years from the date of delivery. The delivery date is the invoice date of purchase of the product by the consumer. If no invoice is available, the production date applies. The consumer is obliged to inform Qonnex bvba in writing of the lack of conformity, and this at the latest within two months after discovery. In the event of a lack of conformity, the consumer is only entitled to a free repair or replacement of the product, which is determined by Qonnex.

Qonnex is not responsible for a defect or damage resulting from incorrect installation, improper or negligent use, incorrect operation, transformation of the product, maintenance in violation of the maintenance instructions or an external cause such as moisture damage or damage due to overvoltage. The mandatory provisions in national legislation on the sale of consumer goods and the protection of consumers in countries where Qonnex sells directly or through distributors, agents or permanent representatives take precedence over the above provisions.

Qonnex bv B-9310 Aalst Belgium [info@2-wire.be](mailto:info@2-wire.be) [www.2-wire.net](http://www.2-wire.net)