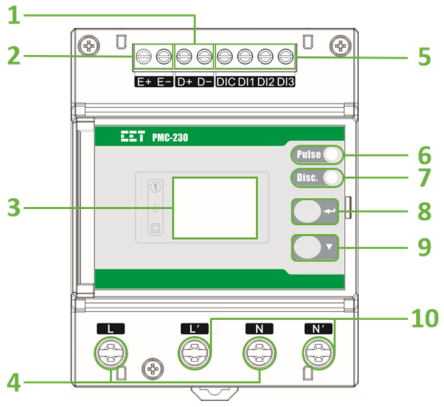
PMC-230 Quick Start Guide

Version 1.0

Package Contents

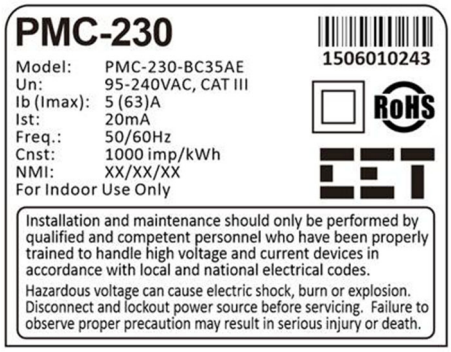
- PMC-230 Meter
- Quick Start Guide (This document)

Overview



Front View

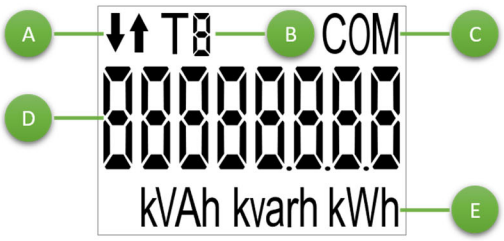
1	RS-485 (D+, D-)
2	Pulse Output (E+, E-)
3	LCD Display
4	L, N from Source
5	Digital Inputs (DIC, DI1, DI2, DI3)
6	LED Pulse Output
7	Relay Status LED
8, 9	Buttons
10	L', N' to Load



Serial Number Label

LCD Display

The meter's Front Panel is used for both display and configuration purposes. The LCD display and the two buttons provide access to measurements, meter information and setup configuration.

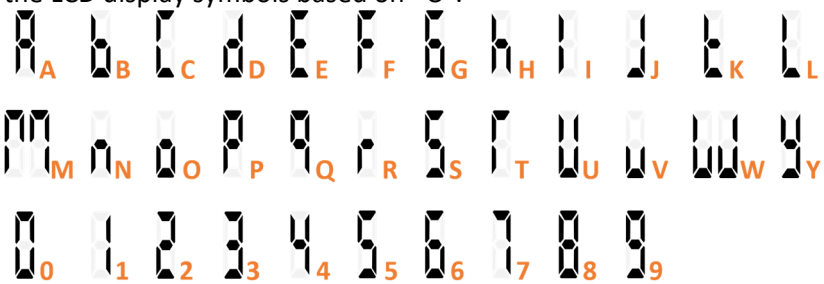


A	Import/Export Indicator
B	Present Tariff
C	Comm. Indicator
D	Measurement
E	Units

LCD Display

LCD Symbols

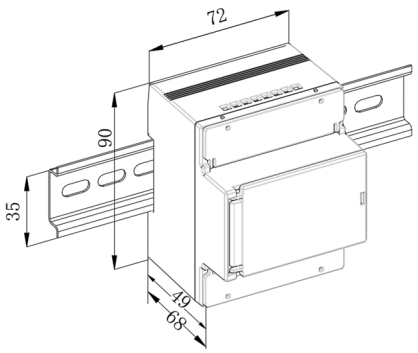
The following figure shows the LCD display symbols based on "8".



LCD Symbols

Meter Installation Steps

- The PMC-230 should be installed in a dry environment with no dust and kept away from heat, radiation and electrical noise source
- Before installation, make sure that the DIN rail is already in place
- Move the installation clip at the back of the PMC-230 downward to the "unlock" position
- Mount the PMC-230 on the DIN rail
- Push the installation clip upward to the "lock" position to secure the PMC-230 on to the DIN Rail

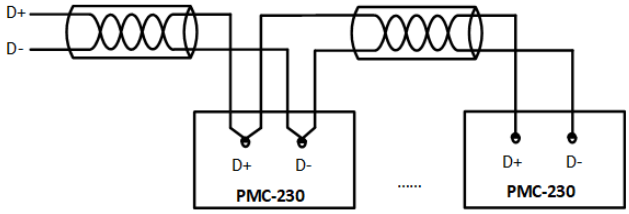


Meter Installation

Revision Date: October 17, 2019

RS-485 Wiring

- The PMC-230 provides one standard RS-485 port and supports the Modbus RTU protocol. Up to 32 devices can be connected on a RS-485 bus. The overall length of the RS-485 cable connecting all devices should not exceed 1200m.
- If the master station does not have a RS-485 communication port, a RS-232/RS-485 or USB/RS-485 converter with optically isolated outputs and surge protection should be used.



RS-485 Wiring

LCD Testing

Pressing both the **<↵>** and the **<▼>** buttons simultaneously for 2 seconds enters the **LCD Test** mode. During testing, all LCD segments are illuminated and will blink on and off three times before returning to the **Data Display** mode.

Button Functions

Buttons	Data Display Mode	Setup Configuration Mode
<↵>	Toggles among **Energy**, **Real-time Data** and **Counters**	1. Pressing this button for 2 seconds toggles between **Data Display** and **Setup Configuration** modes. 2. Once inside the **Setup Configuration** mode, pressing this button selects a parameter for modification. 3. Once a parameter is selected, its value blinks when it's being modified. Pressing this button again will save the current value into memory. 4. If the selected parameter is a numeric value, pressing this button momentarily moves the cursor one position to the left. Once the left-most digit is reached, pressing this button again will save the current value into memory. 5. Pressing this button for two seconds returns to the **Data Display** mode.
<▼>	Scroll to the next parameter inside the sub-menu	1. "—Prog—" is displayed when the **Setup Configuration** mode is first entered. 2. 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. 3. If the selected parameter is an enumerated value, pressing this button scrolls through the enumerated list.

Setup Parameters

Menu	Parameter	Description	Range/Options	Default
PROG	Programming	Setup Configuration Mode	/	/
PW	Password	Enter Password	0 to 9999	"0"
SET PW	Set Password	Enter New Password	0 to 9999	"0"
DISC	Disconnect	Switch the Disconnect Relay Off/On	ON/OFF	ON
PF	PF Convention	PF Convention	IEC/IEEE/-IEEE	IEC
Id	Unit ID	COM Unit ID	1 to 247	100
bd	Baud Rate	Data rate in bits per second	1200/2400/4800/ 9600/19200	9600
CFG	COM Port Configuration	Data Format	8N2/8O1/8E1/8N1	8E1
nUM	No. of Windows	No. of Windows for DMD Calculation	1 to 15	1
PErIod	Period	Demand Period	0 to 60 (min)	5
LEd	LED Energy Pulsing	Configure LED Energy Pulsing	OFF/kWh/kvarh	kWh
do	DO Energy Pulsing	Configure DO Energy Pulsing	OFF/kWh/kvarh	kWh
CLr En	Clear Energy	Clear All Energy	YES/NO	NO
CLr dMd	Clear Demand	Clear All Demand	YES/NO	NO
CLr DI	Clear DI	Clear All DI Counters	YES/NO	NO
CLr oT	Clear Operating Time	Clear running hours for device	YES/NO	NO
CLr SoE	Clear SoE	Clear SOE	YES/NO	NO
CLr CnT	Clear Counters	Clear both FP & COM Setup Counters	YES/NO	NO
	Set Date	Enter the Current Date	YY-MM-DD	/
	Set Clock	Enter the Current Time	HH:MM:SS	/
FW	Firmware Version	Firmware Version	e.g. 10002 means V1.00.02	/
	Firmware Published Date	Firmware Version Date	YYMMDD	/
ProT	Protocol	Protocol Version	e.g. 1.1 means V1.1	/
SN	The left 5 digits	The left 5 digits of SN	XXXXX	/
	The right 5 digits	The right 5 digits of SN	YYYYY	/