

PMC-512-A Quick Start Guide

Version V1.00

Package Contents

- PMC-512-A & Optional Accessories
- Factory Test Report
- CD with PMC-512-A User Manual
- Quick Start Guide (this document)

Meter Overview



Front View

	Terminal	Description
A	I1-I12	12xCurrent Inputs
B	IN1-IN12, COM	12xDigital Inputs
C	V1, V2, V3, VN	4xVoltage Inputs
D	VG	Ground Voltage Input
E	L/+, N/-	Power Supply
F	1D+,1D-,2D+,2D-	2xRS-485 Ports
G	AI+, AI-	1xAnalog Input
H	DO11, DO12	1xDigital Output

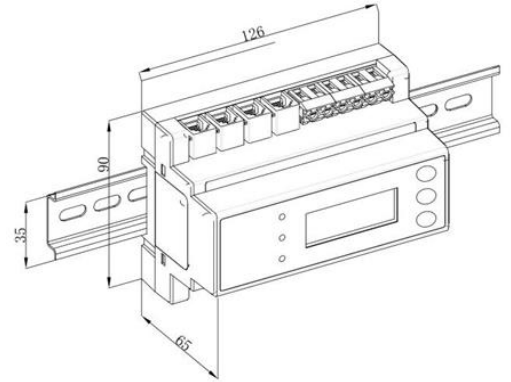
PMC-512
1408005818

Model: PMC-512-ALA325BE
Power Supply: 95-250V $\overline{\text{ac}}$, 2W, OVC III
Voltage Inputs: 240V 3 $\overline{\text{w}}$ -L-N, 415V 3 $\overline{\text{w}}$ -L-L, CAT III
Current Inputs: 40mA AC
Frequency: 45-65Hz
Constant: 400 imp/kWh (Default)
DI Excitation: 48VDC, External
P1 (HMI): 38400, 8E1
P2: 9600, 8E1

Installation and maintenance should only be performed by qualified and competent personnel who have been properly trained to handle high voltage and current devices in accordance with local and national electrical codes.

Hazardous voltage can cause electric shock, burn or explosion. Disconnect and lockout power source, open all PT secondaries and short all CT secondaries before servicing. Failure to observe proper precaution may result in serious injury or death.

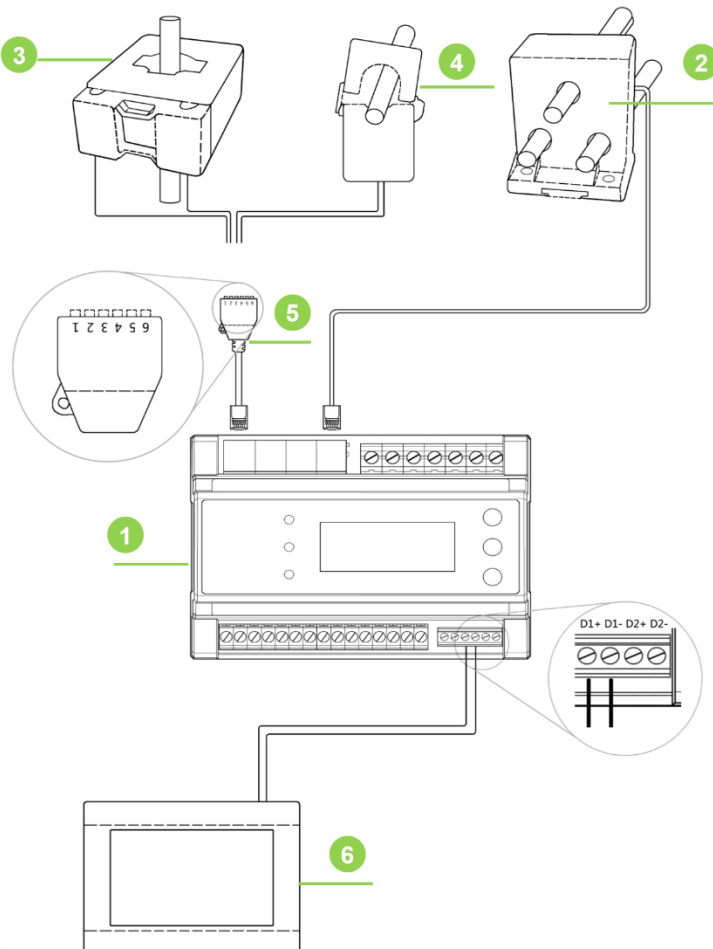
Serial Number & Warning Label



Mounting the Meter

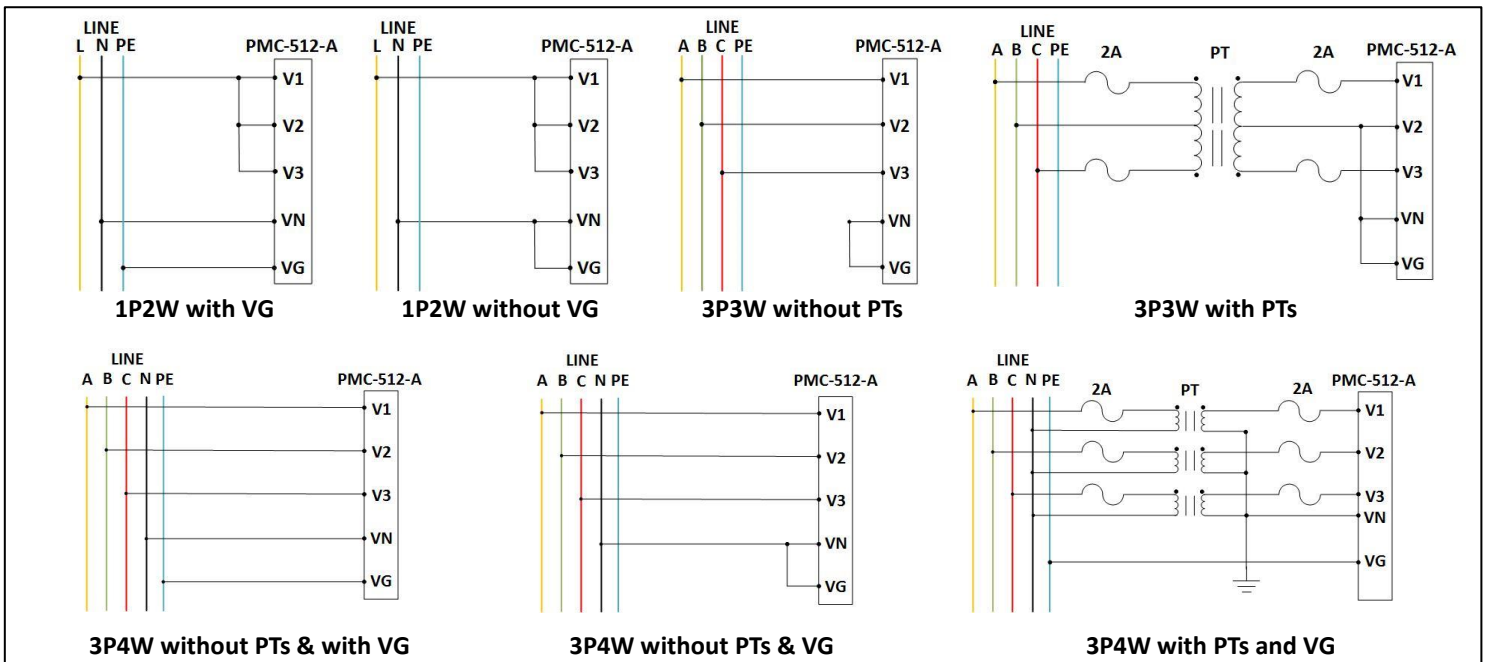
- Before installation, make sure that the DIN rail is already in place.
- Move the installation clips at the back of the PMC-512-A downward to the “unlock” position.
- Align the top of the mounting channel at the back of the PMC-512-A at an angle against the top of the DIN rail.
- Rotate the bottom of the PMC-512-A towards the back while applying a slight pressure to make sure that the device is completely and securely fixed on to the DIN rail.
- Push the installation clips upward to the “lock” position to secure the PMC-512-A on to the DIN rail.

Installation Instructions



- 1 PMC-512-A
- 2 3 \emptyset Molded Case CT
 - PMC-CT-100A-40mA-3P-A
 - PMC-CT-250A-40mA-3P-A
 - PMC-CT-630A-40mA-3P-A
- 3 Solid Core CT
 - PMC-CT-100A-40mA-12-A
 - PMC-CT-250A-40mA-A
 - PMC-CT-400A-40mA-A
 - PMC-CT-800A-40mA-A
- 4 Split Core CT
 - PMC-SCCT-100A-40mA-16-A
 - PMC-SCCT-200A-40mA-24-A
 - PMC-SCCT-400A-40mA-35-A
 - PMC-SCCT-800A-40mA-A
 - PMC-SCCT-1600A-40mA-A
 - PMC-SCCT-5A-1.667mA-10-A
- 5 CT Termination Connector
 - PMC-BCC-3CT
- 6 7” Color Touch Screen Display
 - PMC-512-HMI (Optional)

Wiring Diagrams



Using the Front Panel Buttons

Button	Auto-Scroll Mode	Main Menu	Setup Configuration Mode
<O>	Pressing this button momentarily enters the Main Menu .	<ul style="list-style-type: none"> Pressing this button enters the highlighted sub-menu. Pressing this button at the Setup menu enters the Setup Configuration Mode. Holding this button for 2s returns to the Auto-Scroll mode from the Main Menu or returns to the previous menu level from inside a sub-menu. 	<ul style="list-style-type: none"> While inside the Setup menu, pressing this button enters the sub-menu. While inside a sub-menu, pressing this button enters the next sub-menu or selects a parameter to modify. After the parameter has been modified, pressing this button saves the changes. Holding this button for 2s returns to the previous menu level.
<◀>	Pressing this button scrolls through the following Parameter Categories if the respective option has been enabled in the Auto Scroll setup under the Maintenance menu: <ul style="list-style-type: none"> U 1-∅ SM1 to SM12 (SM=Sub Meter) 3-∅ SM1 to SM4 VM1 to VM4 (VM=Virtual Meter) AI 	<ul style="list-style-type: none"> Pressing this button inside the Metering sub-menu scrolls through the following Parameter Categories: <ul style="list-style-type: none"> U 1-∅ SM1 to SM12 3-∅ SM1 to SM4 VM1 to VM4 AI Pressing this button inside the Alarm Status sub-menu scrolls through the Alarm Categories While inside other sub-menus, pressing this button scrolls to the previous item. 	<ul style="list-style-type: none"> While inside the Setup menu or a sub-menu, pressing this button scrolls to the previous menu item or setup parameter. After a setup parameter has been selected, pressing this button moves the cursor one position to the left if it is a numeric value. Once the cursor has reached the left most digit, pressing this button again will move the cursor to the right most digit. This button is ignored if the selected parameter is an enumerated value.
<▼>	Pressing this button scrolls to the next parameter in a certain Parameter Category .	<ul style="list-style-type: none"> Pressing this button scrolls to the next sub-menu, the next parameter in a certain sub-menu, the next parameter in a certain Parameter Category inside the Metering sub-menu or the next alarm parameter in a certain Alarm Category inside the Alarm status sub-menu. 	<ul style="list-style-type: none"> While inside the Setup menu or a sub-menu, pressing this button scrolls to the next menu item or setup parameter. After a setup parameter has been selected, pressing this button increments the selected digit if it is a numeric value or scrolls through the selection list if it is an enumerated value.

Basic Setup Parameters

Basic	Description	Range	Default
Nom. Freq.	Nominal Frequency	50Hz/60Hz	50Hz
Wiring Mode	Meter's Wiring Connection	3P4W/3P3W/1P2W/DEMO	3PH4W
U Primary	PT Primary	1 to 1,000,000V	380V
U Secondary	PT Secondary	1 to 450V	380V
COM1/2 Unit ID	Modbus Address	1 to 254	100
COM1/2 Baud Rate	Data rate in bits per second	1200/2400/4800/9600/19200/38400/57600	38400
COM1/2 Config	Data Format	8N2/8O1/8E1/8N1	8E1
SM Breaker Rating	Breaker Rating	1~30,000	32
SM CT Primary	CT Primary	1~60,000A	100
SM CT Secondary	CT Secondary (Depends on the type of selected CT)	0~60,000 (x0.1) mA	400 or 50000
Polarity	Polarity	Normal/Reverse	Normal
U Phase	Voltage Phase	Not Used/U1/U2/U3/U12/U23/U31	U1
CT Type	CT Type	Solid/Split	Solid