PMC-518D RTU
Remote Terminal Unit

The PMC-518D RTU is an intelligent remote terminal unit, featuring quality construction, DIN rail mount and a large, easy to read LCD display. It comes standard with 18 self-excited Digital Inputs for status monitoring or utility pulse counting and optionally provides 6 or 8 Digital Outputs for remote control applications and two Analog Inputs for interfacing with external transducers. Further, the SOE Log records all setup changes, DI status changes and DO operations in 1ms resolution. With the standard RS-485 port and Modbus RTU protocol support, the PMC-518D becomes a vital component in any building, factory, substation or utility automation systems.

Applications

- Status monitoring
- Remote control
- Utility pulse counting for WAGES applications
- Substation, building, factory and utility automation

Features Summary

Ease of use

- Large, backlit, easy to read LCD display
- Simple, password-protected setup via front panel or free PMC Setup software
- Easy installation with DIN rail mounting, no tools required

SOE Log

- 128 events time-stamped to ±1ms resolution
- Setup changes and I/O operations

Digital Inputs

- 18 channels for external status monitoring or utility pulse counting with programmable scales for collecting WAGES information
- Volts free dry contact, 24VDC internally wetted
- 1000Hz sampling

Digital Outputs (Optional)

- 6 or 8 channels for remote control applications
- Form A mechanical relays

Analog Inputs (Optional)

- 0-20 / 4-20mA DC input
- Interface with external transducer signals
- Programmable zero and full scales

Communications

- Optically isolated RS485 port
- Baud rate from 1200 to 19,200bps
- Modbus RTU protocol

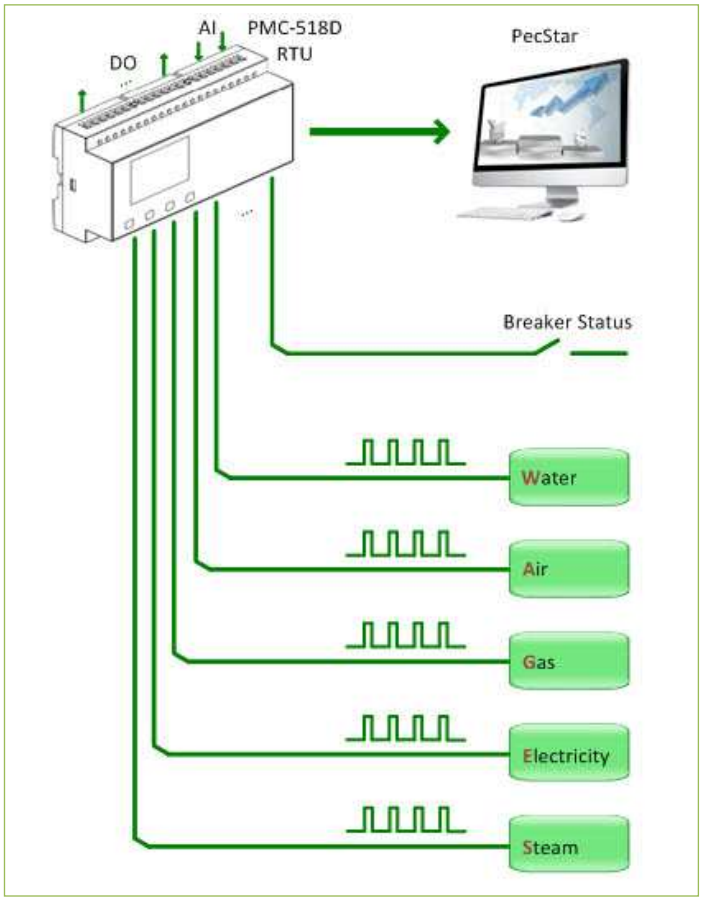
Real-time clock

- Battery-backed real-time clock @ 6ppm or 0.5s/day
- Can be set through front panel or via communications

System Integration

- Supported by our PecStar® iEMS and PMC Setup
- Easy integration into other Automation or SCADA systems via Modbus RTU protocol

Typical Application



Technical Specifications

Power Supply (L+, N-, GND)	
Standard	95-250VAC/DC, ±10%, 45-65Hz
Burden	5W
Digital Inputs (DI1 to DI18, DICOM)	
Type	Dry contact, 24VDC internally wetted
Sampling	1000Hz
Debounce	1ms minimum
Digital Outputs (DO1 to DO8)	
Type	Form A mechanical relay
Loading	5A @ 250VAC or 30VDC
Analog Inputs (AI1, AI2)	
Type	0-20mA / 4-20mA DC
Accuracy	0.5%
Overload	24mA
Environmental conditions	
Operating temp	-25°C to +70°C
Storage temp	-40°C to +85°C
Humidity	5% to 95% non-condensing
Atmospheric pressure	70 kPa to 106 kPa
Mechanical Characteristics	
Installation	Standard DIN-Rail Mount
Unit Dimensions	180x94.5x57.5mm
IP Rating	52
Shipping Weight	0.7kg
Shipping Dimensions	222x136x100mm

PMC-518D RTU
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Standards of Compliance

Safety Requirements	
CE LVD 2006 / 95 / EC	EN61010-1-1-2001
Insulation Dielectric test: 2kV @ 1 minute Insulation resistance: >100MΩ Impulse voltage: 5kV, 1.2/50μs	IEC 60255-5-2000
Electromagnetic Compatibility CE EMC Directive 2004 / 108 / EC (EN 61326: 2006)	
Immunity Tests	
Electrostatic discharge	IEC 61000-4-2:2001 Level III
Radiated fields	IEC 61000-4-3:2008 (10 V/m)
Fast transients	IEC 61000-4-4:2004 Level III
Surges	IEC 61000-4-5:2005 Level III
Conducted disturbances	IEC 61000-4-6:2006 Level III
Magnetic Fields	IEC 61000-4-8:2009 Level IV
Oscillatory waves	IEC 61000-4-12:1995 Level III
Radio Disturbances	CISPR 22:2006, Level B
Emission Tests	
Limits and methods of measurement of electromagnetic disturbance characteristics of industrial, scientific and medical (ISM) radio-frequency equipment	EN 55011: 2009 (CISPR 11)
Limits and methods of measurement of radio disturbance characteristics of information technology equipment	EN 55022: 2006+A1: 2007 (CISPR 22)
Limits for harmonic current emissions for equipment with rated current ≤16 A	EN 61000-3-2: 2006+A1: 2009
Limitation of voltage fluctuations and flicker in low-voltage supply systems for equipment with rated current ≤16 A	EN 61000-3-3: 2006
Emission standard for residential, commercial and light-industrial environments	EN 61000-6-3: 2007
Electromagnetic Emission Tests for Measuring Relays and Protection Equipment	IEC 60255-25: 2000

Mechanical Tests		
Vibration Test	Response	IEC 60255-21-1 Level I
	Endurance	IEC 60255-21-1 Level I
Shock Test	Response	IEC 60255-21-2 Level I
	Endurance	IEC 60255-21-2 Level I
Bump Test		IEC 60255-21-2 Level I

Ceiec Electric Technology

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Ordering Information

Ceiec Electric Technology

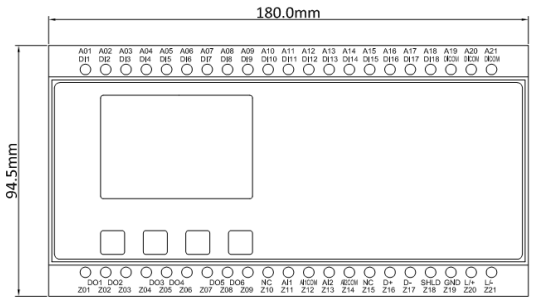
Version 20111231

Product Code	Description
PMC-518D RTU	
Power Supply	
2	95-250VAC/DC, 45-65Hz
I/O	
A	18DI
B*	18DI + 6DO
C*	18DI + 2AI
D*	18DI + 6DO + 2AI
F*	18DI + 4DO + 4DO (NC)
G*	18DI + 8DO
Display Language	
E	English

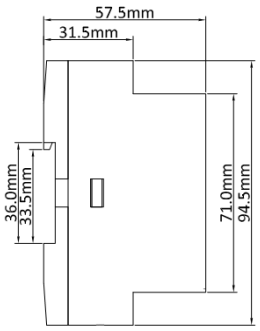
PMC-518D - 2 A E — PMC-518D-2AE (Standard Model)

* Additional charges apply

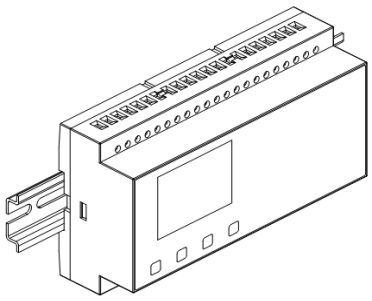
Dimensions and Installation



Front Panel



Side View



Installation

Your Local Representative

Revision Date: June 18, 2011

Designed For Reliability *Manufactured To Last*