



PMC-521D-A5 DI/DO Monitoring Terminal



The PMC-521D-A5 DI/DO Monitoring Terminal is an intelligent terminal unit, featuring quality construction, DIN Rail mount and a large, easy to read LCD display. It comes standard with 21 Digital Inputs for status monitoring or utility pulse counting, two Analog Inputs for interfacing with external transducers, and optionally provides 6 or 20 Digital Outputs for remote control applications. Further, the SOE Log records all Power on, Power off, setup changes and DI status changes in 1ms resolution. With two standard RS-485 ports and one Ethernet port support, the PMC-512D-A5 becomes a vital component in any building, factory, data center, substation or utility automation systems.

Applications

- Status monitoring
- Remote control
- Utility pulse counting for WAGES applications
- Data Center, Substation, Building, Factory and Utility Automation

Features Summary

Ease of use

- A large, backlit, easy to read LCD display
- Simple, password-protected setup via LCD Display or our free setup software
- Easy installation with DIN rail mounting, no tools required

Digital Inputs

- 21 channels for external status monitoring or utility pulse counting with programmable scales for collecting WAGES information
- Volts free dry contact, 24VDC internally wetted or 220V AC/DC externally wetted, or 277V AC/DC externally wetted
- 1000Hz sampling
- Externally wetted DI capability of Overload and Voltage Thresholds

Digital Outputs

- 6 or 20 channels for remote control applications
- Form A mechanical relays

Analog Inputs

- 2xAI, 0-20mA/4-20 mA DC input
- Interface with external transducer signals
- Programmable zero and full scales
- Overload @ 24mA maximum

SOE Log

- 1024 events time-stamped to ± 1 ms resolution
- Power On/Off, Setup Changes and DI/DO Changes

Communications

- 1x10Base-T/100Base-TX Ethernet Port with RJ45 connector
- 2xoptically isolated RS-485 ports with baud rate from 1,200 to 115,200bps
- Standard Modbus TCP/RTU protocol support

Real-time clock

- Battery-backed real-time clock @ 6ppm or 0.5s/day

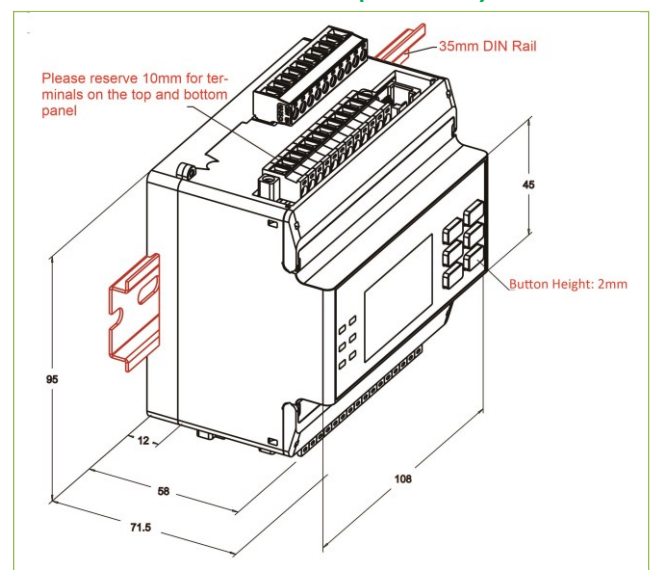
System Integration

- Supported by our PecStar® iEMS
- Integrate with CET's PMC-592 to realize multiple-circuit status monitoring
- Easy integration into other Automation or SCADA systems via Modbus TCP/RTU protocol

Technical Specifications

Power Supply (L/+, N/- or +, -)	
Standard	95-277VAC/DC $\pm 10\%$, 47-440Hz
Optional	20-60VDC
Burden	<7W
Digital Inputs (DI1 to DI21, DIC)	
Type	Dry contact, 24VDC internally wetted, 220VAC/DC externally wetted, 277VAC/DC externally wetted
Sampling	1000Hz
Hysteresis	1ms minimum
Overload	1.1xUn (305V) continuous for 277VAC/DC 1.2xUn (264V) continuous for 220VAC/DC
Voltage Thresholds	220VAC: ≥ 130 VAC ON, ≤ 100 VAC OFF 220VDC: ≥ 140 VDC ON, ≤ 110 VDC OFF 277VAC: ≥ 170 VAC ON, ≤ 130 VAC OFF 277VDC: ≥ 180 VDC ON, ≤ 140 VDC OFF
Digital Outputs (DO1 to DO6 or DO20)	
Type	Form A Mechanical Relay
Loading	5A @ 250VAC or 30VDC
Analog Inputs (AI11, AI12, AI21, AI22)	
Type	0-20mA / 4-20mA DC
Overload	24mA maximum
Communications	
RS-485 (P1, P2)	
Protocol	Modbus RTU
Baud Rate	1.2/2.4/4.8/9.6/19.2/38.4/57.6/115.2kbps
Ethernet (P3)	
Baud Rate	10Base-T/100Base-TX
Protocol	Modbus RTU/TCP, SNTP
Terminals Installation Torque	
Tightening Torque	4 kgf.cm/3.54 lb-in/0.40 N.m/M3
Max. Torque	5 kgf.cm/4.34 lb-in/0.49 N.m/M3
Wire Size	0.2-3.5 mm ² (12-26 AWG)
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	DIN Rail
Unit Dimensions	108x95x71.5mm
IP Rating	IP30

Dimensions and Installation (Unit: mm)



Designed For Reliability

Manufactured To Last



PMC-521D-A5 DI/DO Monitoring Terminal

Standards of Compliance

Safety Requirements	
CE LVD 2014 / 35 / EU	EN 61010-1: 2010+A1: 2019
Insulation	EN 61010-1: 2010+A1: 2019
AC Voltage:	3kV @ 1 minute
Insulation resistance:	>100MΩ
Impulse voltage:	6kV, 1.2/50μs
Electromagnetic Compatibility CE EMC Directive 2014 / 30 / EC (EN IEC 61326: 2021)	
Immunity Tests	
Electrostatic Discharge	EN 61000-4-2: 2009
Radiated Fields	EN IEC 61000-4-3: 2020
Fast Transients	EN 61000-4-4: 2012
Surges	EN 61000-4-5: 2014+A1: 2017
Conducted Disturbances	IEC 61000-4-6: 2014
Magnetic Fields	IEC 61000-4-8: 2010
Voltage Dips and Interruptions	EN IEC 61000-4-11: 2020
Ring Wave	EN 61000-4-12: 2017
Emission Tests	
Limits and Methods of Measurement of Electromagnetic Disturbance Characteristics of Industrial, Scientific and Medical (ISM) Radio-Frequency Equipment	EN 55011: 2016 +A1: 2017+A11: 2020+A2: 2021
Limits and methods of measurement of radio disturbance characteristics of information technology equipment	EN 55032: 2015+AC: 2016+A11: 2020
Limits for Harmonic Current Emissions for Equipment with Rated Current ≤16 A	EN IEC 61000-3-2: 2019+A1: 2021
Limitation of Voltage Fluctuations and Flicker in Low-Voltage Supply Systems for Equipment with Rated Current ≤16 A	EN 61000-3-3: 2013+A1: 2019+A2: 2021
Emission Standard for Industrial Environments	EN IEC 61000-6-4: 2019
Mechanical Tests	
Vibration Test	IEC 60068-2-6: 2007
Shock Test	IEC 60068-2-27: 2008
Spring Hammer Test	IEC 60068-2-75: 2014

Ordering Information



Version 20250925

Product Code	Description
PMC-521D DI/DO Monitoring Terminal	
Basic Function	
A5	Dot-Matrix LCD, DI/DO monitoring
Power Supply	
2	95-277 VAC/DC ± 10%, 47-440Hz
3	20-60 VDC
I/O	
A	21xDI (Dry Contact) + 2xAI + 6xDO
B	21xDI (220VAC/DC) + 2xAI + 6xDO
C	21xDI (277VAC/DC) + 2xAI + 6xDO
D	20xDO
Communication Ports	
A	2xRS-485 + 1xEthernet Port
Language	
E	English
PMC-521D - A5 2 A A E	PMC-521D-A52AAE (Standard Model)

Front Panel and Terminals Diagram

Standard Model (95-277 VAC/DC, 21xDI + 2xAI + 6xDO)	
Description	Description
A	2xRS-485 Port
B	2xAnalog Input
C	6xDigital Output
D	1x10BaseT/100BaseTX Port
E	21xDigital Input
F	Power Supply

Your Local Representative

CET Electric Technology Inc.
E: sales@cet-global.com
W: www.cet-global.com

Revision Date: June 5, 2026

Designed For Reliability

Manufactured To Last