PMC-1304-3
Communications Processor



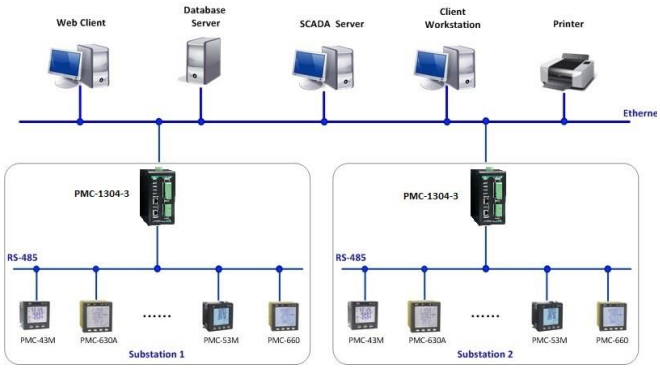
Overview

The PMC-1304-3 is the ideal embedded equipment for connecting RS-422 or RS-485 enabled serial devices to an IP-based LAN, making it possible for SCADA or other applications to access serial devices over a LAN for monitoring and control applications. The PMC-1304-3 has been specifically designed with industrial automation in mind and therefore provides un-surpassed performance and reliability under the harshest industrial environments. The basic Model, PMC-1304-3-T, provides Modbus Gateway function from Modbus TCP to RTU and supports interrogation from multiple Modbus Masters. The optional RTU Model, PMC-1304-3-R, provides Modbus Mastering capability with local data caching and logging to enhance overall system performance and redundancy. Not only does the RTU Model support the polling of Real-Time data, it also supports the uploading of Data Logs, Event Logs and Waveform Logs for CET devices that provide these advanced capabilities.

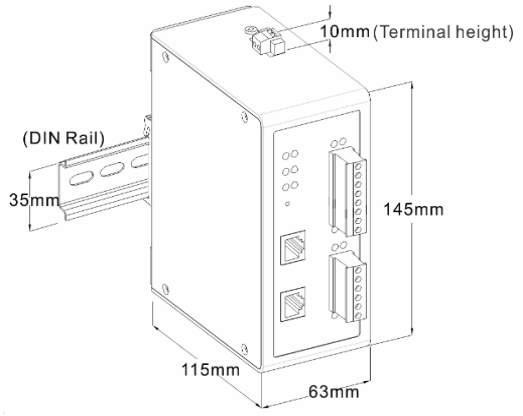
Features

- Dual 10/100BaseT (RJ45)
- Standard 2xRS-485, optional 4xRS-485
- Basic Model
  - ❖ Modbus Gateway function for 32 Slave IEDs per RS-485 or a maximum of 128 Slave IEDs per device
- RTU Model
  - ❖ Modbus Mastering, Local Data Caching and Logging for 64 Slave IEDs per RS-485 port or 256 Slave IEDs per device for a maximum of 102,400 data points.
  - ❖ 2GB On-Board Log Memory, sufficient for storing data @ 60-minute interval for 900 days
  - ❖ Scheduled uploading of Data Log in CSV format to an external FTP Server
- The PMC-1304-3 is designed to withstand the harshest industrial environments
  - ❖ 15 kV (contactless) & 6kV (contact) ESD protection and 3kV isolation protection for all Serial signals
  - ❖ 1.5 kV isolation protection for Ethernet ports
- Simple port configuration via its built-in web interface
- DIN-Rail or Surface Mounting

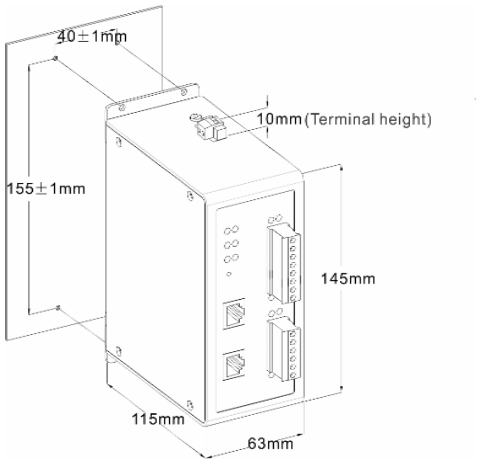
Typical Application



Dimensions and Installation



DIN-Rail Mounting



Surface Mounting

Designed For Reliability *Manufactured To Last*

PMC-1304-3
Communications Processor

Technical Specifications

10/100 Base Ethernet Port (P1, P2)	
Standard	10/100BaseT, RJ45 connector
Cable	CAT5, CAT5e (100m maximum)
Serial Ports (P3, P4, P5, P6)	
Standard	1xRS-422/485 (P3), 3xRS-485 (P4, P5, P6)
Comm. Parameters	
Data bits	5, 6, 7, 8
Stop bits	1, 2
Parity	None, Even, Odd, Mark, Space
Baud rate	300 to 115,200 bps
LED Indicators	
Run (Green)	On – Abnormal condition Blinking – Working normally Off – Not powered up or abnormal condition
Alarm (Red)	On – Abnormal condition Blinking – Restoring default parameters
P1 & P2 (Yellow)	On – Connected but no data activities Blinking – Data activities Off – Disconnected
P3, P4, P5, P6 Rx (Green) Tx (Yellow)	 Blinking – Receiving data Blinking – Transmitting data
Protocol	
Protocol	Modbus RTU, Modbus TCP, FTP, HTTP
Power Supply (L/+, N/-)	
Standard	95-250VAC/DC, 47-440Hz
Burden	<5W
Protection	
ESD Protection	15kV (Contactless) and 6kV (Contact) ESD protection for all Serial signals
Isolation Protection	3kV for all Serial signals 1.5kV for Ethernet Ports
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 110kPa
Mechanical Characteristics	
Casing	Galvanized Iron
Unit Dimensions	115x63x145mm
Shipping Weight	0.95kg
Shipping Dimensions	300x210x150mm
Mounting	DIN-Rail or Surface Mounting
IP Rating	30

Standard of Compliance

Safety Requirements		
Insulation		IEC 60255-5-2000
Dielectric Test		2kV @ 1 minute
Insulation Resistance		>100MΩ
Impulse Voltage		5kV
Electromagnetic Compatibility		
Electrostatic Discharge		IEC 61000-4-2:2001 Level IV
Radiated Fields		IEC 61000-4-3:2006 Level III
Fast Transients		IEC 61000-4-4:2004 Level IV
Surges		IEC 61000-4-5:2005 Level IV
Conducted Disturbances		IEC 61000-4-6:2006 Level III
Magnetic Fields		IEC 61000-4-8:2001 Class III
Oscillatory waves		IEC 61000-4-12:1995 Level III
Mechanical Tests		
Vibration Test	Response	IEC 255-21-1:1988 Level I
	Endurance	IEC 255-21-1:1988 Level I
Shock Test	Response	IEC 255-21-2:1988 Level I
	Endurance	IEC 255-21-2:1988 Level I
Bump Test		IEC 255-21-2:1988 Level I

Ordering Information

Product Code	Description
PMC-1304-3 Communications Processor	
Basic Function	
T	Modbus TCP/RTU Gateway with Multi-Master Support
R*	Modbus Mastering with 2GB On-Board Storage
Serial Port	
00-02	2xRS-485 (P3-P4)
00-04*	4xRS-485 (P3-P6)
Power Supply	
2	95-250VAC/DC, 47-440Hz
Ethernet Port	
T2-XX-XXXX	100BaseT (P1/P2)
Interface Language	
E	English

PMC-1304-3 - T - 00-02 - 2 - T2-XX-XXXX - E PMC-1304-3-T-00-02-2-T2-XX-XXXX-E (Standard Model)

* Additional charges apply

Contact us

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Designed For Reliability **Manufactured To Last**