IoTstar Supported



PMC-224xM

Dual LAN Ports

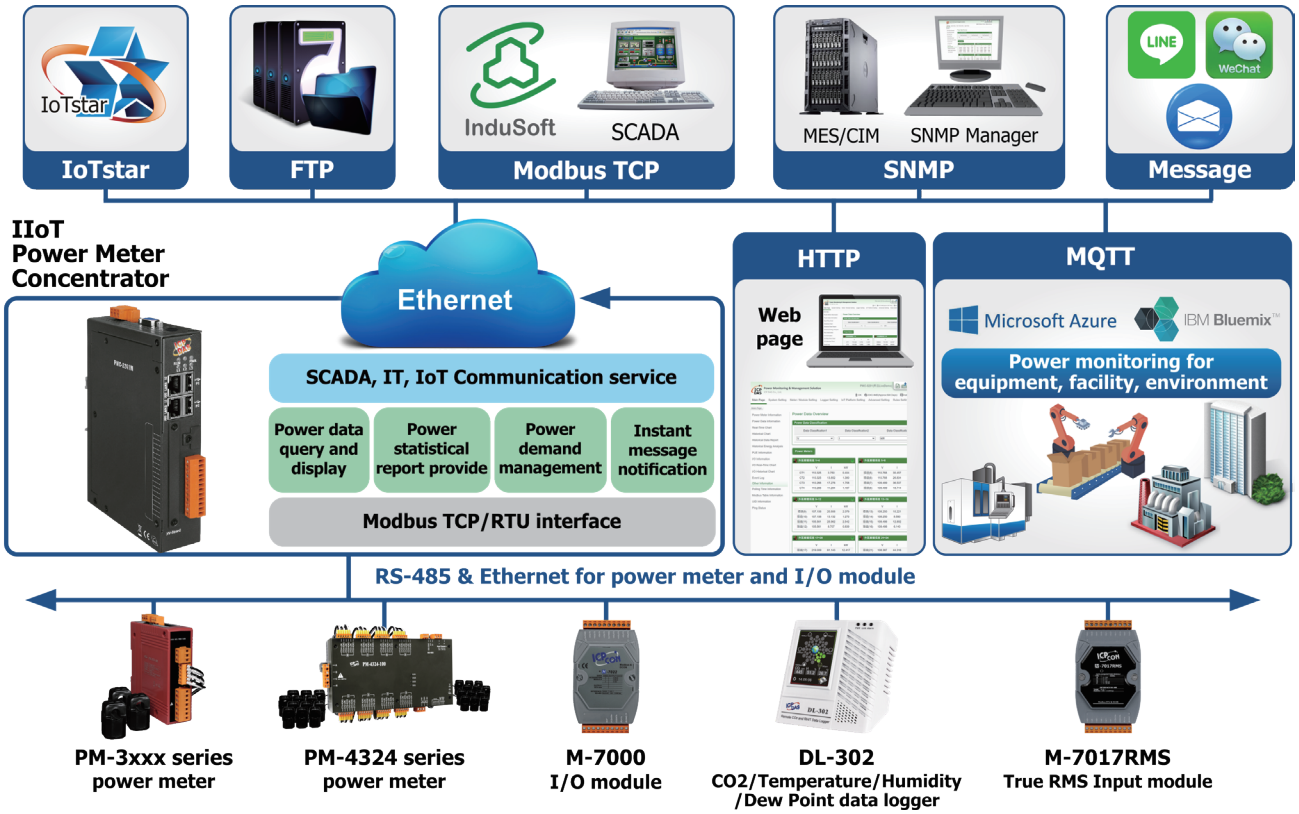
Features

- No extra software tool is required, using browsers to perform system operations
- Support at most "24 ICP DAS Modbus Power Meter modules + 8 Modbus I/O modules" (Max. total of 16 TCP type modules)
  * COM3 and COM4 can connect to Max. 16 Modbus RTU modules individually.
  * LAN can connect to Max. 16 Modbus TCP modules
  * Support at most 4 ICP DAS PM-4324 series Power Meters.
- Display real-time or historical power data; Provide power data statistics report
- Power data logger and data files send back function supported.
- Built-in IF-THEN-ELSE logic engine for power demand management
- Support Line, WeChat and Email message notification
- Support Modbus TCP/RTU, SNMP, MQTT, FTP and CGI protocols.
- Support connection with IoT Cloud Platform (Microsoft Azure,IBM Bluemix) and IoTstar Cloud Management Software

Introduction

PMC-224xM is the IIoT Power Meter Concentrator for meeting the trend of energy management in the Industry 4.0 age. It provides flexible integration with the ICP DAS power meters via RS-485 or Ethernet interface, and features various functions such as: measure the power consumption of the devices, energy usage analysis, power data log operation, power demand management and alarm notification functions. PMC-224xM offers a user-friendly and intuitive web site interface that allows users to implement the Energy monitoring system just a few clicks away; no programming is required. By working with the power meters, IF-THEN-ELSE logic rule execution ability, and LINE/Email/WeChat alarm message notification functions, PMC-224xM offers more thought-out power demand management functions, and is able to perform load shedding of the devices if required. It also supports the Modbus TCP/RTU, SNMP, FTP, MQTT and CGI protocols for seamless integration with the back-end SCADA/IT/IoT systems.

System Architecture



LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

Hardware Specifications

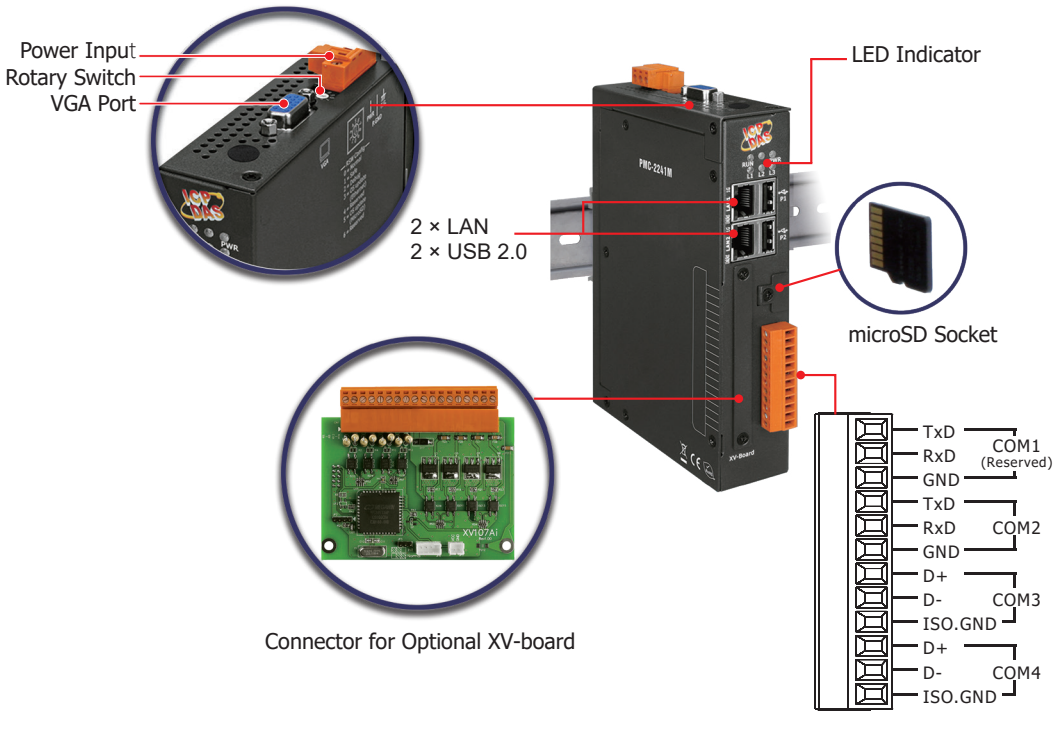
Model	PMC-224xM
System	
CPU	32-bit ARM CPU, 1 GHz
VGA port	Yes (Only for system diagnostic and recovery operations)
microSD	Built-in one 4 GB microSD card (support up to 32 GB microSDHC card)
Communication Interface	
Ethernet	RJ-45 x 2, 10/100/1000 Base-TX (Auto-negotiating, Auto MDI/MDI-X)
COM 2	RS-232 (TxD, RxD, GND), non-isolated, Speed: 115200 bps max
COM 3/COM 4	RS-485 (Data+, Data-), Speed: 115200 bps max. Support 2500 VDC isolation.
Module Support	
Local Side	Support ICP DAS XV-board
Remote Side	• Support at most "24 ICP DAS Modbus Power Meters + 8 Modbus I/O modules" (Max. 16 Modbus TCP modules) * COM3 and COM4 interface can connect to Max. 16 Modbus RTU modules individually. * LAN can connect to Max. 16 Modbus TCP modules. * Support at most 4 ICP DAS PM-4324 series Power Meters
Mechanical	
Casing	Metal
Dimensions (W x L x H; mm)	35 × 167 × 119
Installation	Wall Mounting Installation or DIN-Rail Installation (Optional)
Environmental	
Temperature/ Humidity	Operating Temperature: -25 °C to +75 °C; Storage Temperature: -40 °C to +80 °C; 10 to 90% RH, Non-condensing
Power Requirements	
Input Range/ Consumption	+12 to +48 VDC; 4.8 W

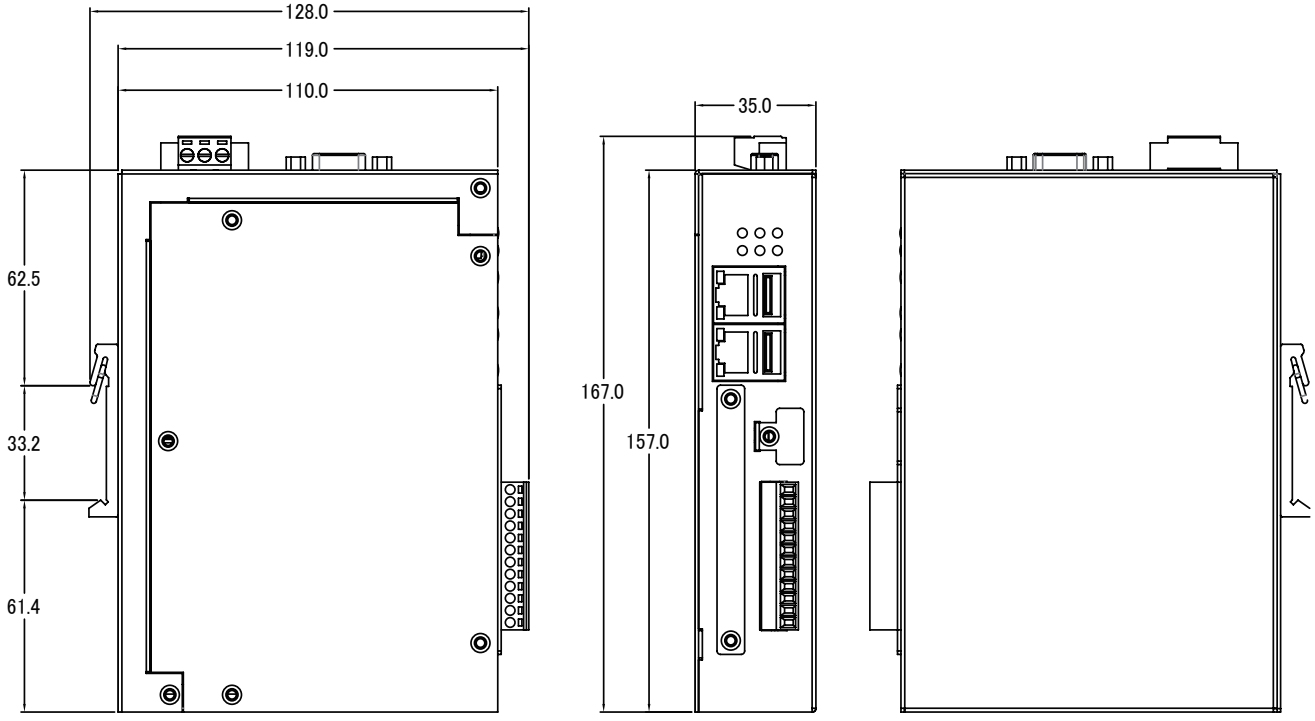
Software Specifications

Function	Description
Operation Interface	• Web Page
Power data collection	• Power data collection; Real-time and Historical power data displayed • Power data logging and historical power data statistics report provided • PUE information provided and displayed
Power demand management	• Built-in IF-THEN-ELSE logic engine for thought-out power demand management • Adjust equipment operation by its power status via Modbus I/O modules • Provide Schedule function to manage the equipment's operation(via the Modbus TCP/RTU protocol) • Provide message notification function via Email, LINE (PMC-2246M also provides WeChat message notification function)
Integrate with SCADA/ IT/IoT/ System	• Support Modbus TCP/RTU, MQTT, SNMP(v1, v2c), CGI protocols to transmit real-time power data • Power data logging and power data file auto send-back (by FTP protocol) & recovery when network is resumed after disconnection • Support DDNS (Dynamic DNS) system • Support Microsoft Azure, IBM Bluemix IoT Cloud platforms • Support ICP DAS IoTstar Cloud software

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

Appearance





Left Side View | Front View | Right Side View

Ordering Information

PMC-2241M CR	IIoT Power Meter Concentrator (Metal casing)
PMC-2246M CR	IIoT Power Meter Concentrator (Metal casing; Additional support for WeChat Message Sending)

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000