



PMC-224xM-iWSN

Dual LAN Ports

Features

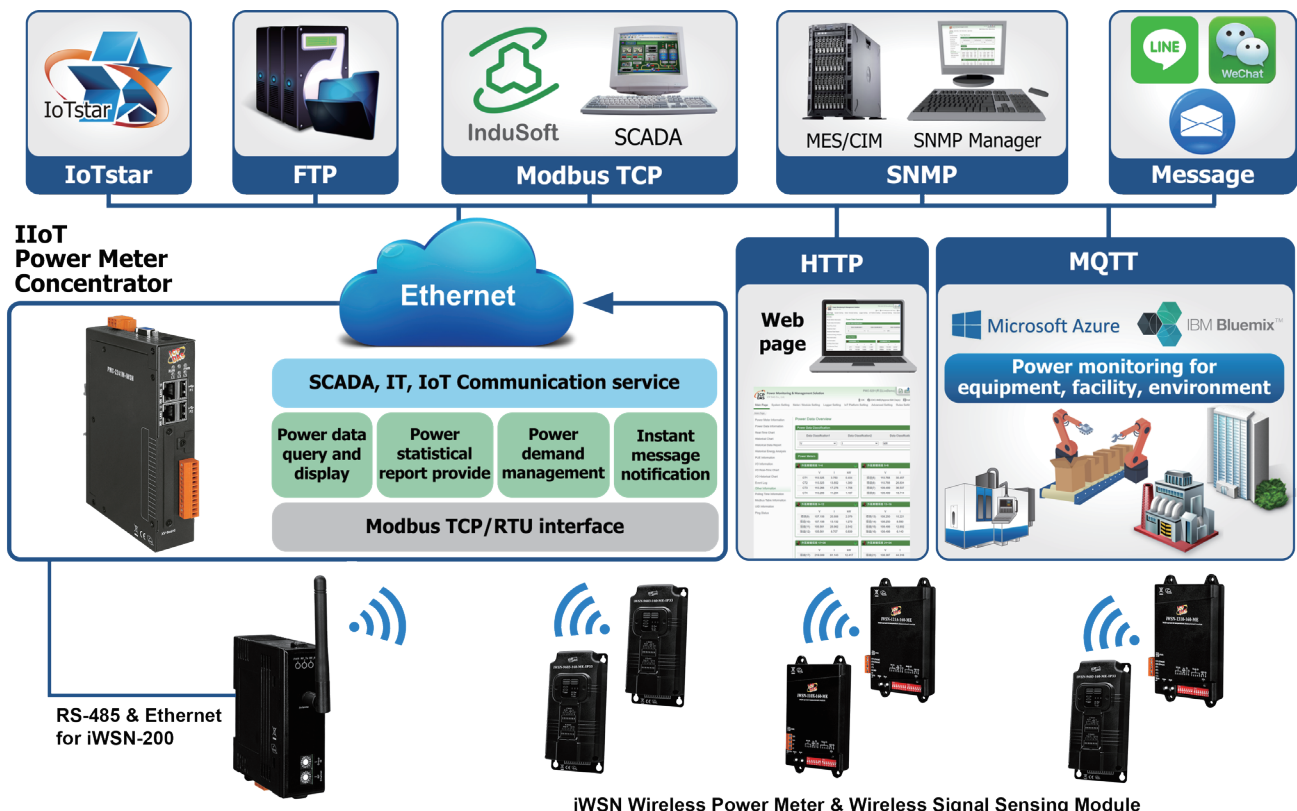
- No extra software tool is required, using browsers to perform system operations
- Up to 3 iWSN-200 iWSN data concentrators be connected, supporting up to 93 ICP DAS iWSN wireless modules.
- Supported iWSN wireless module types:
 - * Power meter : iWSN-9603
 - * Signal sensing module : iWSN-110X, iWSN-121A, iWSN-1310.
- 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-iWSN serves as an iWSN Wireless Power Meter Concentrator to meet the needs of energy management in the Industry 4.0 era. It allows flexible integration with ICP DAS iWSN wireless power meters via iWSN-200 data concentrator, and offers a range of functions including device power consumption measurement, energy usage analysis, power data logging, power demand management and alarm notification. PMC-224xM-iWSN offers a user-friendly and intuitive web site interface that enables users to easily implement an Energy monitoring system with just a few clicks; no programming is required. By working with iWSN power meters, incorporating IF-THEN-ELSE logic rule execution capabilities, and providing LINE/Email/WeChat alarm message notification functions, PMC-224xM-iWSN delivers advanced power demand management functions. In addition, it supports a wide range of network protocols including Modbus TCP/RTU, SNMP, FTP and MQTT, enabling seamlessly connection with back-end SCADA/IT/IoT systems. The PMC-224xM-iWSN can also connect with ICP DAS IoTstar IoT cloud management software, further enhancing its capability to integrate into diverse IT/IoT environments.

System Architecture



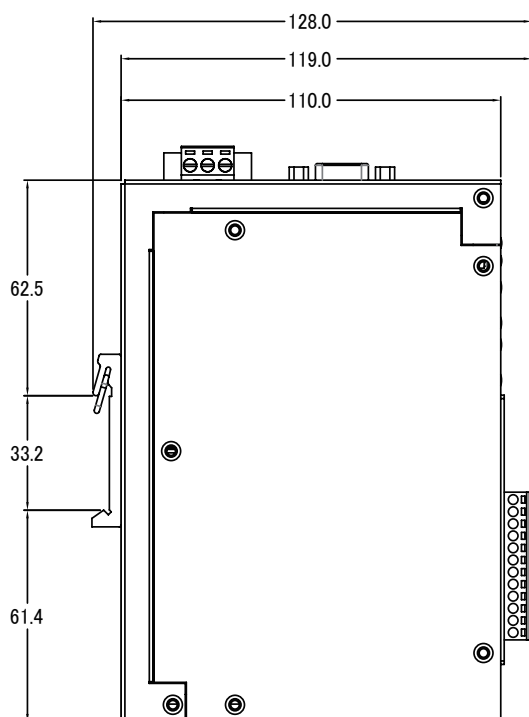
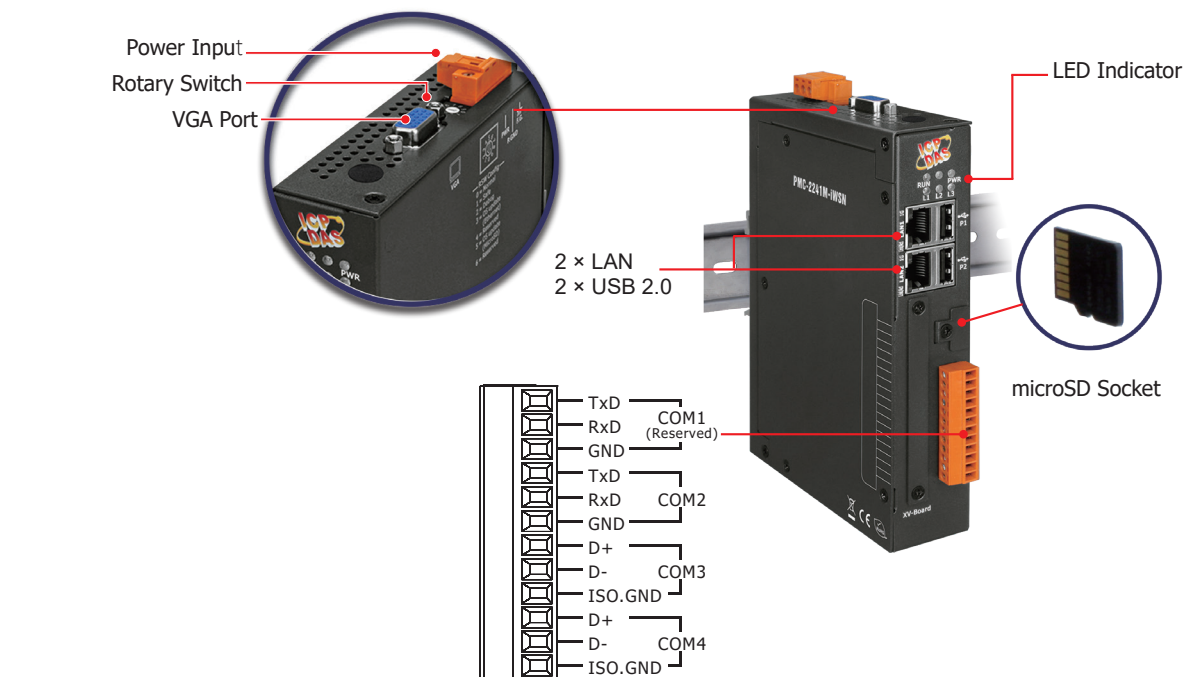
Hardware Specifications

Model	PMC-224xM-iWSN
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 (Tx/D, Rx/D, 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	
Power Meter & I/O Module	- Up to 3 iWSN-200 iWSN data concentrators be connected, and support as most 93 ICP DAS iWSN wireless modules. - iWSN wireless module supported types: * Power meter: iWSN-9603 * Signal sensing module: iWSN-110X, iWSN-121A and iWSN-1310 Please note: PMC-224xM-iWSN only supports iWSN wireless modules. It can not connect with ICP DAS PM-3xxx/PM-4xxx power meter, XV-Board or other wired Modbus I/O module.
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

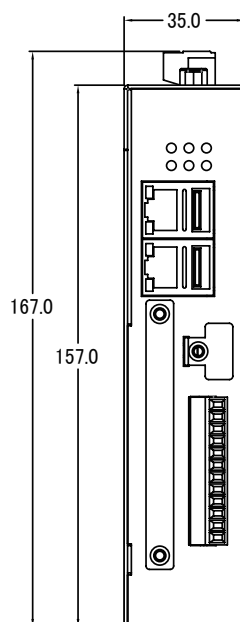
Software Specifications

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 - Supports ICP DAS iWSN signal sensing module to collect sensor data in real time - Provide schedule timing control function - Provide message notification function via Email, LINE (PMC-2246M-iWSN 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

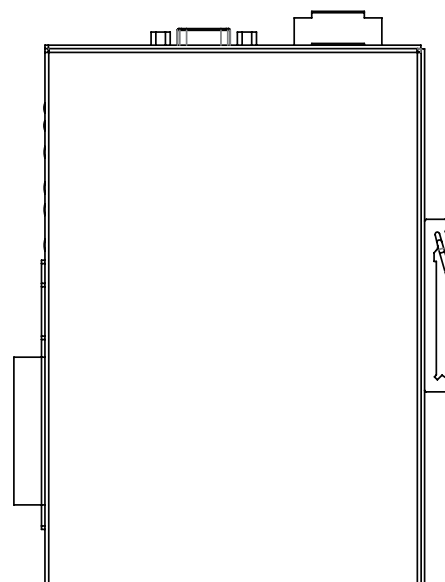
Appearance



Left Side View



Front View



Right Side View

Ordering Information

PMC-2241M-iWSN CR	IIoT iWSN Power Meter Concentrator (Support iWSN wireless power meter and signal sensing module; Metal casing)
PMC-2246M-iWSN CR	IIoT iWSN Power Meter Concentrator (Support iWSN wireless power meter and signal sensing module; Metal casing; Support for WeChat Message Sending)