ICP Electronics
Australia Pty Ltd
TEL: 02 9457 6011
sales@icp-australia.com.au
www.icp-australia.com.au
Proudly Australian-Owned Since 1999

PMC-5231

Industrial IoT Power Meter Concentrator

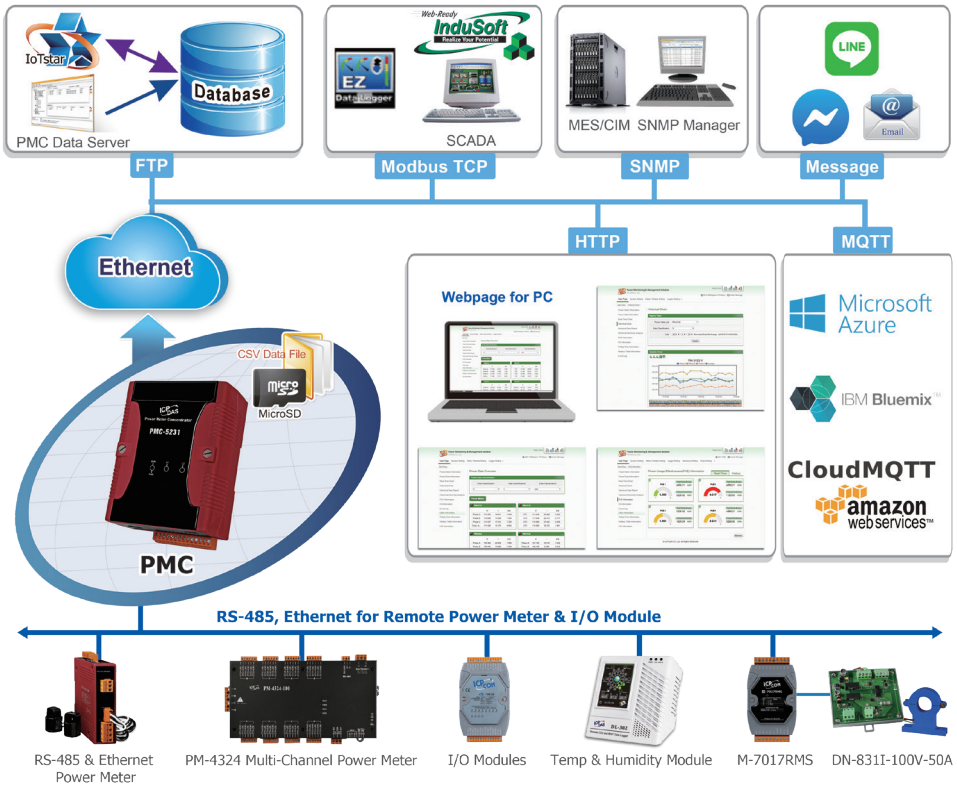
Features

- No extra software tool is required, using browsers to perform system operations
- Support at most 24 ICP DAS Modbus Power Meters (with maximum 16 ICP DAS Modbus TCP Power Meters) and 8 Modbus I/O modules.
  * COM3 and COM4 interface can connect to Max. 16 power meters individually.
  * Support at most 4 ICP DAS PM-4324 series Power Meters.
- Display real-time or historical power data; Provide power data statistics report.
- Provide microSD card for power data log operation. Data log file auto send-back & recovery when disconnected network is resumed.
- Built-in IF-THEN-ELSE logic engine for thought-out power demand management
- Provide alarm message notification function via LINE, Messenger or Email
- Adjust device operations by its power status via Modbus I/O modules
- Provide Schedule function for operations of I/O modules (devices)
- Support Modbus TCP/RTU, SNMP & MQTT protocols
- Support Connection to IoT Cloud Platform (Microsoft Azure and IBM Bluemix); Support ICP DAS IoTstar Cloud software.

Introduction

PMC-5231 is the new generation of Power Meter Concentrator for meeting the trend of energy saving and carbon reduction 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 demand management and alarm notification functions. The PMC-5231 features a built-in Micro SD card. After it retrieving the power data from the power meter, it will save the power data in data log file, and automatically send back the data log files to the back-end management center for data analysis and statistics. PMC-5231 offers a user-friendly and intuitive web site interface that allows users to implement the Energy monitoring and management system just a few clicks away; no programming is required. In addition to ICP DAS XV-Board and M-7000 I/O modules, the PMC-5231 can also connect to standard Modbus TCP/RTU Slave modules. By working with the I/O modules, and functions such as IF-THEN-ELSE logic rule execution and alarm notification functions including LINE/Messenger/Email, PMC-5231 offers more thought-out power demand management and alarm notification functions, and is able to perform load shedding of the devices if required, and enables real-time monitoring and control of the power consumption of the devices. PMC-5231 also supports the Modbus TCP/RTU, SNMP, FTP and MQTT protocols for seamless integration with the back-end SCADA/MES/IT/IoT/Network Management systems. So that the administrator can monitor the status of power consumption of each device and perform statistics and analysis of the power information, thus improving the overall efficiency in electricity consumption to save costs on utility bills. All of these features make PMC-5231 a perfect concentrator of power meter in the Energy monitoring and management application of Industry 4.0 age.

Application

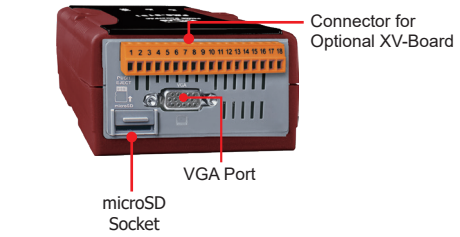


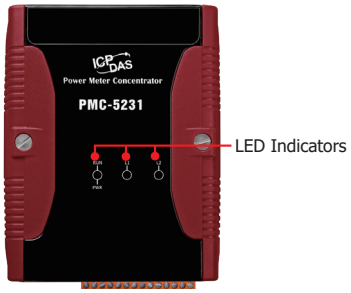
ICP Electronics
Australia Pty Ltd
TEL: 02 9457 6011
sales@icp-australia.com.au
www.icp-australia.com.au
Proudly Australian-Owned Since 1999

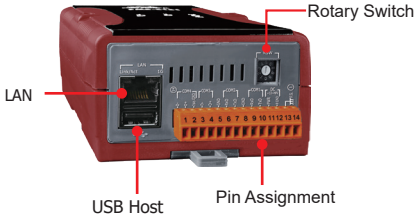
Specifications

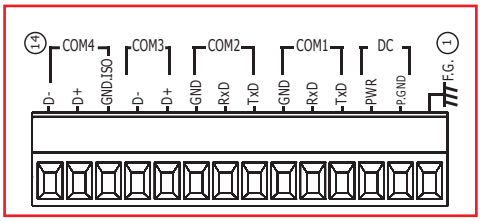
Model	PMC-5231
System Software	
Embedded Service	PMC Runtime，Web server，FTP server
CPU Module	
CPU	32-bit ARM CPU, 1 GHz
SDRAM	256 MB
Flash	256 MB
Expansion Flash Memory	microSD socket with one 4 GB microSD card (support up to 32 GB microSDHC card)
LED Indicator	Yes. LED for Power and System status
Rotary Switch	Yes (0 ~ 9)
Communication Ports	
Ethernet	RJ-45 x 1, 10/100/1000 Based-TX (Auto-negotiating, Auto MDI/MDI-X, LED indicators)
USB 2.0 (host)	1
COM 1	Reserved
COM 2	RS-232 (TxD, RxD, GND), non-isolated, Speed: 115200 bps max.
COM 3	RS-485 (Data+, Data-), non-isolated, Speed: 115200 bps max.
COM 4	RS-485 (Data+, Data-), 2500 VDC isolated, Speed: 115200 bps max.
Mechanical	
Dimensions (W x L x H)	91 mm x 132 mm x 52 mm
Installation	DIN-Rail Mounting
Environmental	
Operating Temperature	-25 to +75 °C
Storage Temperature	-40 to +80 °C
Ambient Relative Humidity	10 to 90% RH (non-condensing)
Power	
Input Range	+12 to +48 VDC
Consumption	4.8 W

Appearance

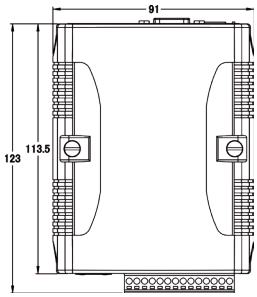




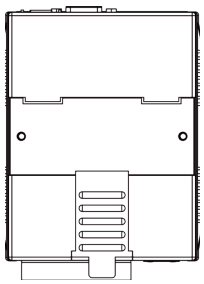


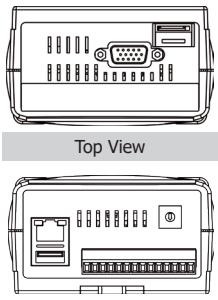


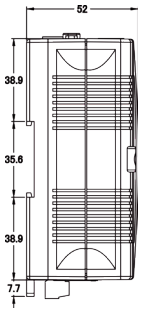
Dimensions (Units: mm)



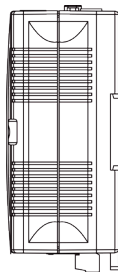
Front View


Rear View


Top View
Bottom View



Left Side View


Right Side View

Ordering Information

PMC-5231 CR	Industrial IoT Power Meter Concentrator(RoHS)

Accessories

Power Meter	Modbus RTU: PM-3033, PM-3133, PM-3112, PM-3114 and PM-4324 Modbus TCP: PM-3033-MTCP, PM-3133-MTCP, PM-3112-MTCP, PM-3114-MTCP and PM-4324-MTCP
DP-660	24 VDC/2.5 A, 60 W and 5 VDC/0.5 A, 2.5 W Power Supply with DIN-Rail Mounting
DP-1200 CR	24 VDC/5.0 A, 120 W Power Supply with DIN-Rail Mounting (RoHS)
MDR-20-24 CR	24 VDC/1.0 A, 24 W Power Supply with DIN-Rail Mounting (RoHS)
MDR-60-24 CR	24 VDC/2.5 A, 60 W Power Supply with DIN-Rail Mounting (RoHS)