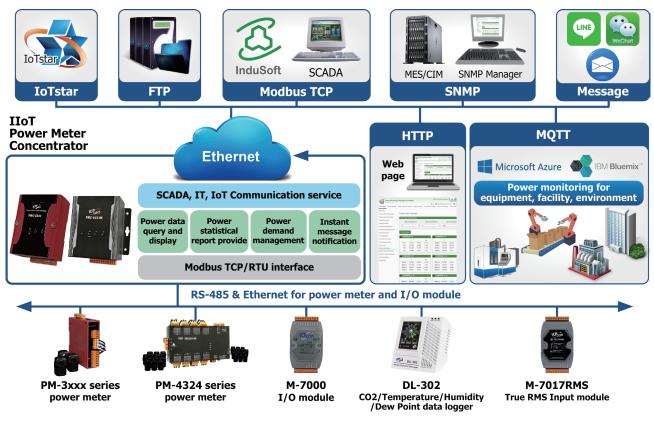


Introduction

PMC-523x(M) 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-523x(M) 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-523x(M) 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



Hardware Specifications

Model	PMC-523x	PMC-523xM
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 Inte	erface	
Ethernet	RJ-45 x 1, 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. COM 4 provides 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. total of 16 Modbus 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) 	
Mechanical		
Casing/ Dimensions (W x L x H; mm)	Plastic ; 91 x 132 x 52	Metal ; 117 x 126 x 58
Installation	DIN-Rail Installation	Wall Mounting/DIN-Rail Installation
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	5	
Input Range/ Consumption	+12 to +48 VDC; 4.8 W	

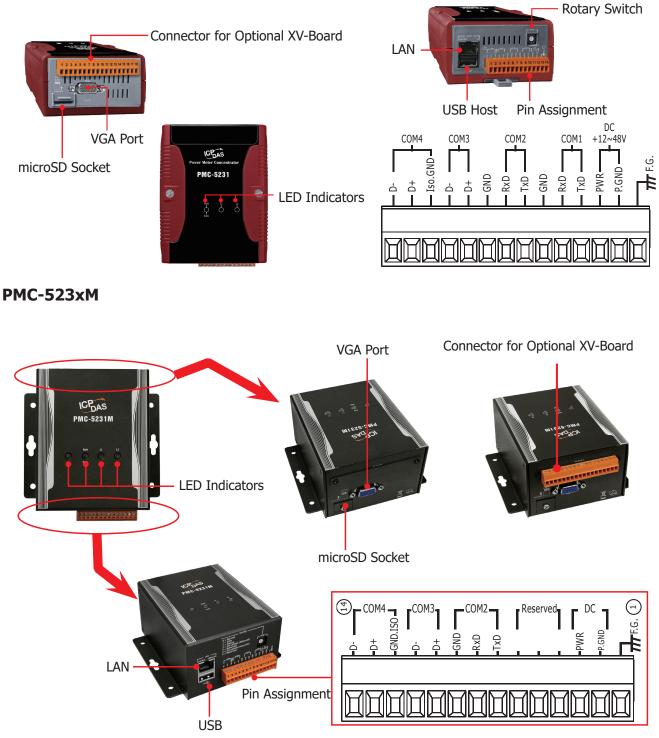
Software Specifications

Function	Description	
Operation Interface	• Web Page	
Power data collection Power demand management	 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 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-5236 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

PMC-523x



Ordering Information

PMC-5231 CR	IIoT Power Meter Concentrator (Plastic casing;)	
PMC-5236 CR	IIoT Power Meter Concentrator (Plastic casing; Additional support for WeChat Message Sending)	
PMC-5231M CR	IIoT Power Meter Concentrator (Metal casing)	
PMC-5236M CR	IIoT Power Meter Concentrator (Metal casing; Additional support for WeChat Message Sending)	