PMC-5151

Features

- No extra software tool is required, using browsers to perform system operations
- Support at most 24 ICP DAS Modbus Power Meter and 8 Modbus I/O modules
- Display real-time or historical power data (in data table or chart form)
- Provide power data statistics report (Daily and Monthly report)
- Offer Flash HMI Tools for easy HMI interface design
- Data file auto send-back & recovery when network is resumed after disconnection
- Built-in IF-THEN-ELSE logic engine for thought-out power demand management
- Provide alarm message notification function via Email or SMS (for SMS message sending, GTM-201-USB is required)
- 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 Slave protocol for seamless integration with SCADA
- With PMC Data Server software, allow importing the power data into database

Introduction

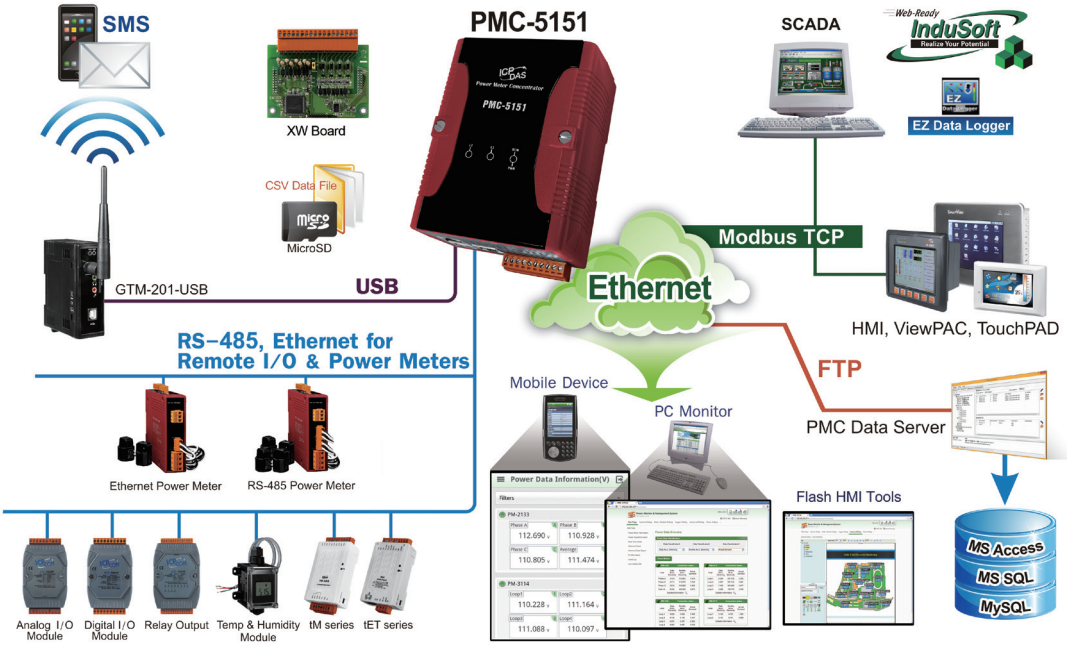
The PMC-5151 is a web-based intelligent Power Meter Concentrator developed by ICP DAS. It offers webpage interface, and features various functions such as: power data collection, logic control, power demand management, data logger and alarm notification functions. PMC-5151 allows connections to ICP DAS Smart Power Meters via RS-485 or Ethernet interface to read the power data of the devices measured by the power meters; and then real-time record the power values in the data logger file. PMC-5151 also provides data logger file auto send-back function; together with PMC Data Server software or SCADA software, it allows collection and analysis of the power data.

PMC-5151 is equipped with built-in Web Server that allows direct connections via browsers to the PMC-5151 for viewing power data and setting up the system parameters. In addition to the standard power data review page, by using the Flash HMI web page editor function on PMC-5151, the users could easily design a specific power monitor page by a few clicks on browsers. PMC-5151 also offers Modbus TCP/RTU Slave function that allows SCADA software or HMI devices to connect to PMC-5151 to get real-time power data of the devices via Modbus TCP/RTU protocol.

In addition to ICP DAS XW-Board and M-7000 I/O modules, the PMC-5151 also could 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 Email/SMS Alarm Notification, PMC-5151 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.

When using PMC-5151 to build a power management and monitoring system, during the whole process of system development, no programming is required; it takes a few clicks on web page to complete all settings; it is easy for the user to quickly view the power data of the devices and furthermore process the data for statistics and analysis. The PMC-5151 is an easy-to-use and easy-to-build total solution for power management and monitoring that makes more efficient energy usage.

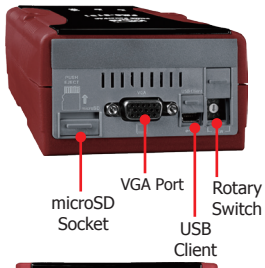
Applications

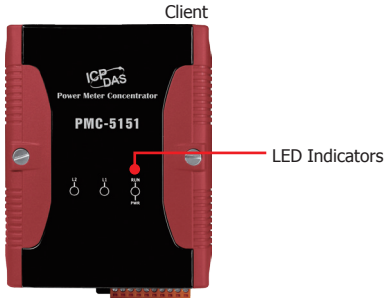


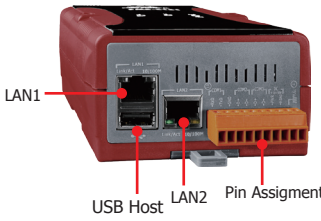
Specifications

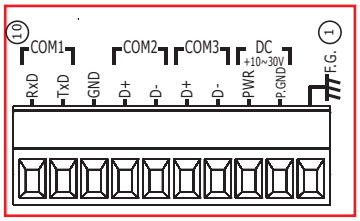
Model	PMC-5151
System Software	
OS	Windows CE OS
Embedded Service	PMC Runtime、Web server、FTP server
CPU Module	
CPU	32-bit ARM CPU
SDRAM	128 MB
Flash	64 MB
Expansion Flash Memory	microSD socket with one 4 GB microSD card (support up to 16 GB microSDHC card)
LED Indicator	1 LED for Power and Running
Rotary Switch	Yes (0 ~ 9)
VGA & Communication Ports	
VGA	Yes, Resolutions:640 × 480/800 × 600
Ethernet	RJ-45 x 2, 10/100 Base-TX (Auto-negotiating, Auto MDI/MDI-X, LED indicators)
USB 1.1 (client)	1
USB 1.1 (host)	1, can connect to SMS Modem (GTM-201-USB)
COM 1	RS-232 (RxD, TxD and GND); non-isolated
COM 2	RS-485 (D+, D-); 2500 VDC; isolated
COM 3	RS-485 (D+, D-); 2500 VDC; isolated
Mechanical	
Dimensions (W x L x H)	91 mm x 126 mm x 52 mm
Installation	DIN-Rail Mounting
Environmental	
Operating Temperature	-25 ~ +75 °C
Storage Temperature	-30 ~ +80 °C
Ambient Relative Humidity	10 ~ 90% RH (non-condensing)
Power	
Input Range	+10 ~ +30 VDC
Isolation	1 kV
Consumption	4.8 W (0.2 A @ 24 VDC)

Appearance

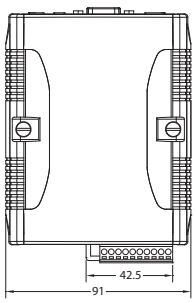




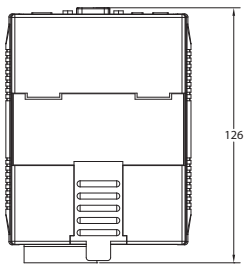




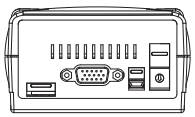
Dimensions (Units: mm)



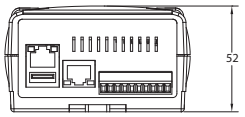
Front View



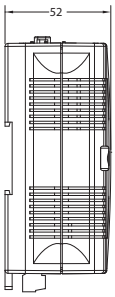
Rear View



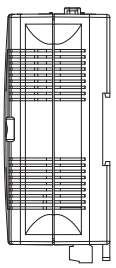
Top View



Bottom View



Left Side View



Right Side View

Ordering Information

PMC-5151-EN CR	Power Meter Concentrator (English) (RoHS)

Accessories

Power Meter	Modbus RTU: PM-213x, PM-311x Modbus TCP: PM-3112-MTCP, PM-3114-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)
GTM-201-USB CR	Industrial Quad-band GPRS/GSM Modem with USB Interface (RoHS)