EATON | Powerware

Powerware® Modbus Card

Product Focus

Features

- Real-time monitoring of power conditions through building management systems (BMS)
- Supports Modbus RTU/Jbus protocol
- Seamless data integration via included Profiler software package
- Flexible network connections
- User-selectable communication topologies
- Supports wide range of UPSs
  - Via native X-Slot™: Powerware 5125; Powerware 9125; Powerware 9155; Powerware 9315; Powerware 9330; Powerware 9340; Powerware 9390
  - Via Expansion Chassis: Powerware Prestige 9; Powerware Plus 12, 18, 36; Powerware 5115; Powerware 9120; Powerware 9170+; Hot Sync SBM or Powerware Hot Sync™ technology

Whether you're in IT, manufacturing, process control, facilities management or another key position in an organization, attaining the highest availability for critical equipment is a top priority. Realizing that goal takes thorough planning, careful design, superior equipment, proper installation and reliable power. To attain the highest availability of power, implementing a backup system including an uninterruptible power system (UPS) and a seamlessly integrated monitoring system is crucial.

Full Integration with Building Management Systems

The Powerware Modbus Card is an X-Slot™ connectivity device that provides continuous, reliable and accurate monitoring of a UPS through a Building Management System (BMS). The card uses the Modicon®, Modbus RTU Protocol to integrate data from the UPS into many, widely used BMS packages such as Wonderware®, Johnson Controls' Metasys®, and Siemens' Apogee™. Key power information may be monitored in real-time to aid in the diagnosis of problems.

Included with the Modbus Card is the Profiler utility. Profiler creates a custom Modbus register map specifically tailored to the key parameters of the particular UPS. This makes it easy to integrate into a BMS. The output of Profiler is a .csv file that can be viewed with Microsoft® Excel, if desired, then imported into a BMS.

Flexible Network Connections

The Modbus Card connects to the network via RS-485 through either an isolated DB-9 port or terminal block. The terminal block allows conventional twisted pair cabling for daisy chaining. Alternatively, RS-232 Modbus communication via a DB-9 port may be used.

Selectable Communication Topologies

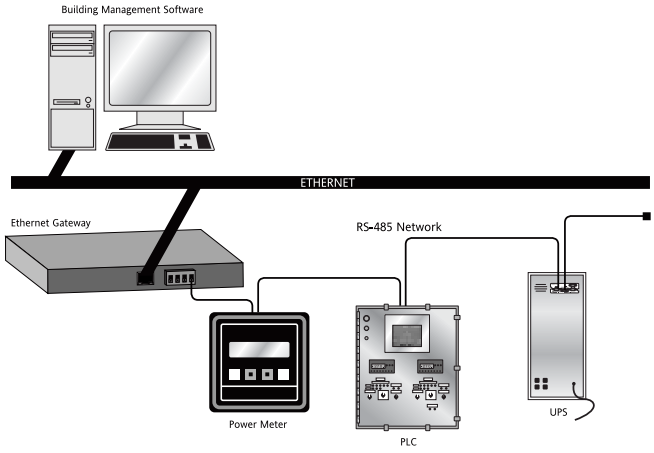
The Modbus Card supports both two-wire and four-wire communication making it suitable for either topology. Also, because of its built-in, user-selectable termination feature, the Modbus Card may be placed at the end of the network.

Support for a Wide Range of UPSs

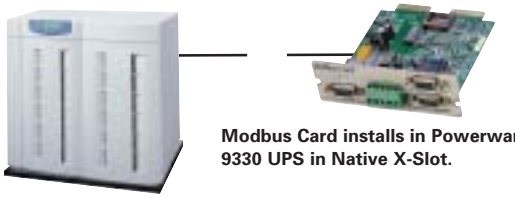
The Modbus Card conforms to the Powerware X-Slot standard. This means that it supports a variety of UPSs that feature a native X-Slot. It also supports other UPSs through the Powerware Expansion Chassis.

Typical Configurations

UPS application in an RS-485 Modbus Network

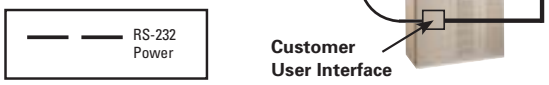


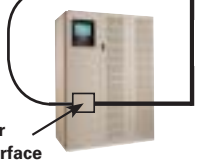
Installation Methods



Modbus Card installs in Powerware 9330 UPS in Native X-Slot.

Powerware 9315 UPS with Modbus Support via Expansion Chassis





Customer User Interface Panel

Technical Specifications

Part Number	103002510-5501		
Description	X-Slot card providing integration with Modbus network and monitoring of associated UPS through Building Management System (BMS)		
Modbus Command Support	Read Input Status (Alarms and Status Points, Function 02) Read Input Register (Meters, Function 04)		
Profiler	Automatically generates Modbus Register Map for each UPS (Windows® 32 application)		
Configuration	Via VT-100 terminal emulation through DB-9 port		
Baud Rate	Selectable 1200 to 19.2k		
Slave Address	Selectable 1 to 247		
Network Connections	RS-485 through isolated terminal block or DB-9 port		
	RS-232 through DB-9 port		
Communications Topology	Selectable two-wire or four-wire		
Additional Hardware Features	Selectable termination resistance Selectable polarity resistance		
UPS Compatibility via Native X-Slot	Powerware 5125, 9125, 9170+, 9330, 9340, 9390		
UPS Compatibility via Expansion Chassis	Powerware Prestige 9 Powerware Plus 12, 18, 36 PW 9315 Reverse Transfer Module	Powerware 5115 Powerware 9120 Powerware 9170+	PW 9315 Hot Sync Parallel Redundant Module Powerware 9315 Hot Sync Parallel Capacity UPM Powerware 9315 Hot Sync Parallel Capacity SBM
Operating Temperature	10ºC to 40ºC		
Operating Humidity	20 to 80% relative humidity (non-condensing)		
Power Input	9VDC unregulated		
Power Consumption	1.5 Watts		
Dimensions LxWxH (inches) (mm)	4.7x4.5x1.5 120x114x39		
Weight	7oz.		
Regulatory	FCC Class B		

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Printed in USA
SFT25FXA
April 2005

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