

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

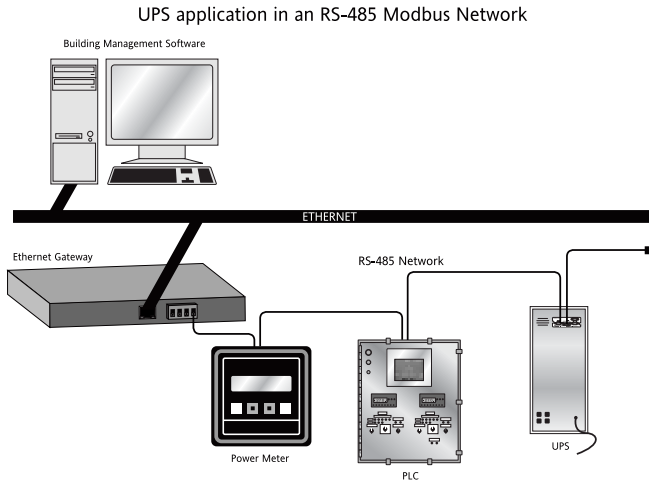
The Modbus Card supports both

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.

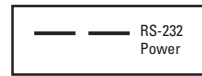
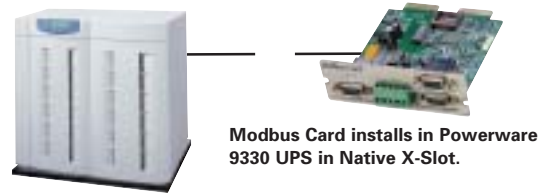
Support for a Wide Range of UPSs

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



Installation Methods



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 | 10°C to 40°C | | |
| Operating Humidity | 20 to 80% relative humidity (non-condensing) | | |
| Power Input | 9VDC unregulated | | |
| Power Consumption | 1.5 Watts | | |
| Dimensions LxWxH (inches) | 4.7x4.5x1.5 | | |
| (mm) | 120x114x39 | | |
| Weight | 7oz. | | |
| Regulatory | FCC Class B | | |

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