Powershield³

Communication Software

PowerShield³ provides efficient, user-friendly UPS management using bar chart displays to show major operational information such as the input voltage, UPS load % and batteries charge %. The software also provides detailed information on fault conditions and UPS operating characteristics. PowerShield³ has been developed with a client/server architecture that makes it flexible and easy to use, and provides multi-lingual and on-line support.

PowerShield³ can be downloaded free of charge from **www.riello-ups.com**

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GRAPHIC MONITORING OF UPS STATUS
PowerShield³ is a simple but powerful RIELLO UPS management tool. There are various graphic versions for all the operating systems.

DETAILED UPS PARAMETER DISPLAY
PowerShield³ provides all the information required for first level diagnostics.

EVENTS LOG AND GRAPHICAL DISPLAY
All changes in UPS operating status are logged and displayed in a graphical format from which the user can monitor trends in the mains electrical parameters monitored.

PROGRAMMING OF UPS PARAMETERS
The user can select several options remotely: turn the UPS on or off, restart after a power loss and instigate a battery test.

GRAPHIC MONITORING OF UPS STATUS VERSION FOR MAC OS X
RIELLO UPS **PowerShield³** software is the only UPS control and shut-down software running under Macintosh with a client-server cross platform architecture. It allows integration in TCP/IP networks with Windows, Novell, IBM OS/2 and the most widely used UNIX operating systems. **PowerShield³** supports the Netman Plus series of network agents and provides multi-language support.

BLOCK AND FUNCTIONAL DIAGRAMS
PowerShield³ also displays the UPS in block format providing the user with information regarding operating status.

NOTIFICATION OF ALARMS VIA E-MAIL, SMS, FAX AND VOICE
PowerShield³ can be configured to forward alarm messages automatically via e-mail, SMS, fax and voice.

Characteristics

- Sequential and priority-based shutdown: PowerShield³ provides unattended shut-down of single and networked PCs, saving any active work and the most widely used applications Windows. Users can define their own shutdown procedures and establish the order in which critical computers (such as servers) are to be powered down
- Multi-platform compatibility: PowerShield³ uses the TCP/IP communications protocol to achieve standardised management and monitoring across the widest possible range of platforms. This makes it possible to monitor computers with different operating systems from a single console, for example monitoring a UNIX server from a PC with Windows and also connecting to UPS located in different geographical areas using dedicated networks (intranets) or the Internet
- Event scheduling: PowerShield³ users can program their own shutdown procedures, detailing power-off and power-up scenarios to increase system safety and, equally important, power economy
- Messages management: PowerShield³ keeps users constantly informed about the status of their local and network UPS. A list can be defined of users who should receive e-mail messages, faxes and SMS when faults or sudden mains power supply failures occur
- Integrated SNMP agent: PowerShield³ features an integrated SNMP agent for UPS management which can send all the information required and generate traps using the RFC 1628 MIB standard. This feature makes it possilbe to

manage the UPS in compatible SNMP management stations such as HP Open View, Novell Managewise and IBM NetView
- Wap server integrated: PowerShield³ allows the user to monitor a UPS through WAP mobile phone
- Security, easy to use and connect, communication is password protected to ensure UPS system security. Using the new discovery/browsing function, all the RIELLO UPS connected to a protected computer or LAN can be displayed in a list format. In the absence of a LAN connection, support is provided for modem-based communication.

Operating systems supported

- Windows 98, Me, NT 4.0, 2000, 2003, XP, Vista
- Linux on processors X86, X86_64 e IA64
- Novell Netware 3.x, 4.x, 5.x, 6
- Mac OS X
- The most widely used UNIX operating systems such as:
  IBM AIX, HP, SUN Solaris INTEL and SPARC, SCO Unixware and Open Server, Silicon Graphics IRIX, Compaq Tru64 UNIX and DEC UNIX, Open BSD UNIX and FreeBSD UNIX, NCR UNIX
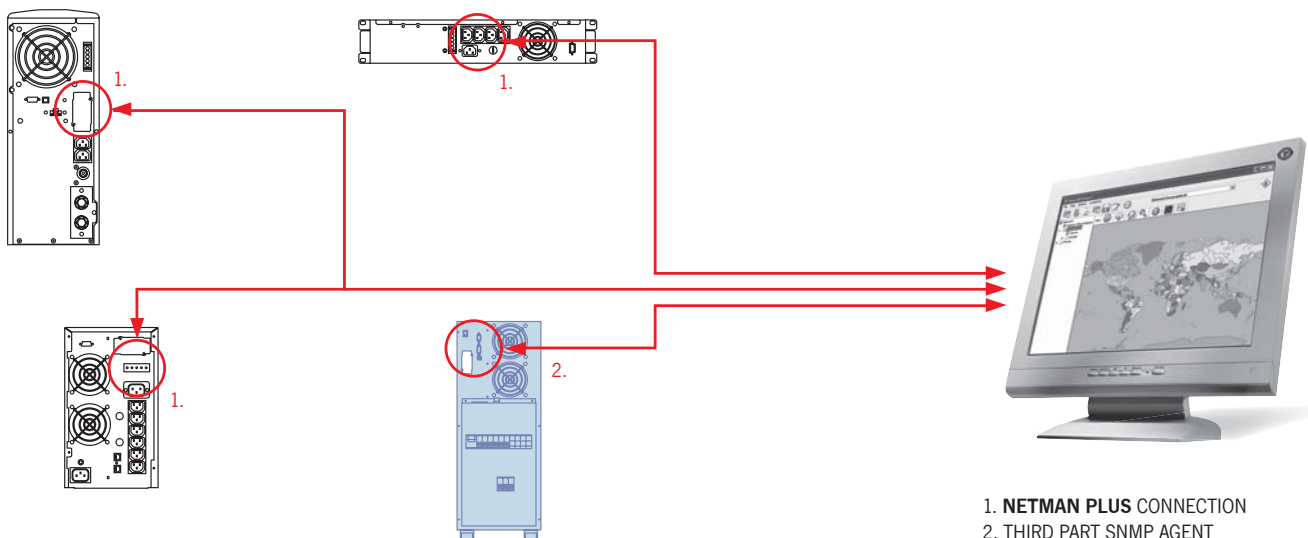- HP OPEN VMS

PowerNETGuard

Supervision software

PowerNETGuard software centralises UPS management using network interface (SNMP) communications. It is ideal for Data Centre managers and medium to large sized networks. PowerNETGuard uses the RFC1628 standard Management Information Base (MIB) and ensures standardised UPS management wherever they are located.

Characteristics

- Centralised control of remote UPS via Ethernet with SNMP protocol
- Multiple-level display of geographical areas, building plans, maps, etc.
- Multi-user access with various levels of security
- Compatible with Netman Plus and RFC1628 standard network interface (SNMP)
- Graphs of physical input and output values stored and backed up to file
- Alarm notification via e-mail and SMS
- Wap Server
- Operating systems supported: Windows (98, ME, NT, 2000, 2003, XP and Vista), Linux, MacOSX, Solaris 8, 9 and 10 and Silicon Graphics IRIX

Centralised control of remote UPS

1. **NETMAN PLUS** CONNECTION
2. THIRD PART SNMP AGENT

Network agent

NetMan 101/102 Plus

The NetMan Plus network agent allows UPS management across a LAN using any of the main network communication protocols - TCP/IP, HTTP and network interface (SNMP). NetMan Plus enabled UPS integrate easily into medium and large sized networks and provide reliable communications between the UPS and management systems employed.

Characteristics

- Configured via TELNET or a serial terminal
- Compatible with PowerShield[3] and PowerNETGuard control software
- Supports the network interface (SNMP) standard communication protocol with proprietary RFC 1628 and MIB
- Integrated Web server for browser-based display
- TeleNetGuard modem compatible
- Firmware upgradeable through the serial port
- E-mail sent through SMTP server

Protocol Converter

Multicom 301/302

The MultiCOM 301/302 protocol converter may be used to monitor the UPS using the MODBUS/JBUS protocol on RS232 or RS485 serial lines. It can also managee a second independent RS232 serial line that can be used to connect to other devices such as the Netman 101 or a PC using PowerShield[3] software.

Characteristics

- Port configuration for MODBUS/JBUS as RS232 or RS485
- Management of two independent serial lines
- Suitable for Building Management System (BMS) integration
- LED communication flow indicators
- Firmware upgradeable through the serial port

Serial link duplexer

Multicom 351/352

The MultiCOM 351/352 is a serial duplexer that allows two devices to be connected to a single serial port on a UPS.
It can be used where numerous serial connections and multiple UPS polling are required, and is ideal for LAN networks with a firewall.

Characteristics

- Cascading configuration giving a maximum of 4 serial communication ports
- LED communication flow indicators
- Firmware upgradeable through the serial port.

Serial / USB port
Multicom 362

MultiCOM 362 provides a UPS with an additional RS232 serial interface or USB port. The USB port allows the UPS to communicate with Apple Macintosh computers as well as Windows and Linux operating systems.

Characteristics

- Compatible with USB 1 or 2
- Compatible with PowerShield[3]
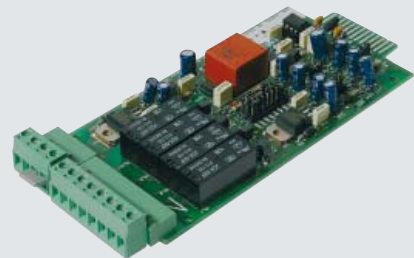
Serial / EPO port
Multicom 372

MultiCOM 372 provides a UPS with an additional RS232 serial interface port. The card has Emergency Power Off (EPO) and Remote Shut Down (RSD) inputs with terminal connections.

Characteristics

- EPO and UPS shutdown interface
- 12Vdc 80mA contact option

Contacts / EPO board
Multicom 382

MultiCOM 382 provides a set of relay contacts to provide UPS alarm and status indication.
The contacts are connected through terminal connections. Signal contacts include Emergency Power Off (EPO), Remote Shut Down (RSD), On Battery, On Bypass, Alarm and Low battery. The contacts are change over or normally open.

Characteristics

- Max. 3A current at 250Vac
- Signal contact customisation

Protocol converter
Multi I/O

Multi I/O has configurable input and output signal contacts to allow UPS integration with control systems. It can be used to connect two devices to a single UPS serial communication port. It can also communicate using the MODBUS/JBUS protocol on RS485 lines.

Characteristics

- 8 analog/digital inputs
- 8 relay outputs to monitor UPS and mains status
- It can control two independent RS232/RS485 serial lines to monitor the UPS and its operating states using the MODBUS/JBUS protocol
- Firmware upgradeable through the serial port

USB serial converter
USB Converter

The RS232-USB converter allows UPS without a USB port to connect to Macintosh, Windows and Linux PCs with this type of port.

Characteristics

- Compatible with USB 1 or 2
- Compatible with PowerShield[3]

Serial link / contacts duplexer
Multifunction I/O

Multifunction I/O is a Dialog plus range accessory through which you can monitor battery operation, by-pass, alarm and battery discharged status reports with dry contacts (maximum current 8A/250V). The accessory also has an input which is used to set up the configurable remote on, remote off and remote on/off functions through the UPSTools software (vers. 1.3.3 or higher).
These functions are provided for UPS with firmware version SWM020-01-16 or higher.

Characteristics

- Max. current 8A at 250Vac
- Possibility of configuring the signal-to-contact associations
- Pass-through serial link for PC connection

Protocol converter
Profibus Converter

The Profibus Dp Gateway is an accessory with which you can connect a UPS to a Profibus DP network. With this device management and monitoring of the UPS can be integrated in a control system based on one of the field buses most widely used in industry for communication between control/automation systems and distributed I/O.

Characteristics

- PROFIBUS DP-V1 Protocol
- Configurable address from 1 to 126

- Configurable baud rate from 9.6 kBaud to 93.75 kBaud
- Led reporting the communication flow

MULTI PASS 16
WALL MOUNT VERSION

REAR PANEL MULTI PASS 16-R
RACK MOUNT VERSION

Manual Bypass
Multi Pass 16 and 16-R

Multi PASS is a maintenance bypass to allow a UPS to be powered down and removed for service without disruption to the connected load(s).
Multi PASS has both manual and automatic transfer functions. If the UPS is accidentally disconnected or fails any load(s) connected to Multi PASS are automatically transfered to the mains supply. Multi PASS is available in wall mounted or 19" rack mount formats. RIELLO UPS supplies a wide range of external maintenance bypasses and switchgear for their UPS up to the 800kVA Master Plus and for parallel systems up to 6,4MVA.

Characteristics

- Wall or rack mount versions
- Back-feed protection

- Manual and automatic transfer functions
- Mains power present LED indicator
- IEC, UK, Schuko and hard wired connected options

Communication Kit
Kit for AS400 and i-Series

The IBM AS/400 has a single-level memory management feature that makes it compulsory for the system to be shutdown in a controlled and orderly manner. Without UPS protection an AS/400 is not protected from mains failures. A momentary loss of power can cause hardware damage, data corruption and a lengthy reboot period.
The RIELLO UPS AS/400 interface kit allows a UPS to be connected to the AS/400 to initiate an orderly system shutdown on mains failure.

Characteristics

- Compatible with all AS/400 systems
- Supports all the RIELLO UPS ranges

Remote Monitoring Panel
Multi Panel

MultiPanel is a remote monitoring device that can provide a detailed UPS status overview in real time. It is compatible with all Riello UPS and can display values for UPS specific input and output supplies, and battery set measurements.

MultiPanel has a high-definition graphical display and can report in 7 languages: English, Italian, German, French, Spanish, Russian and Chinese. It has 3 independent serial ports, one of which allows for UPS monitoring via the MODBUS/JBUS protocol (on either an RS485 or RS232 serial line). The others can be used with devices such as the Netman 101 Plus or a PC running PowerShield[3] software.

Characteristics

- Graphical high definition LCD panel
- Three independent serial connections
- Compatible with most BMS management programs
- Communications flow LED status indicator
- Serial port upgradeable firmware

Compatibility table

	Standard fittings						Software and optional accessories															
	USB Port	RS232 port	SLOT	UPS Modem Management	Microsoft Plug & Play	PowerShield[3]	NetMan 101 plus	NetMan 102 plus	MultiCOM 351	MultiCOM 352	MultiCOM 301	MultiCOM 302	MultiCOM 362	MultiCOM 372	MultiCOM 382	Multi I/O	Multifunction I/O	Profibus converter	AS/400 Kit	PowerNetGuard	Telenet Guard	Multipanel
PLUG DIALOG	1					•																
WIN DIALOG PLUS		1			•	•	•		•		•						•		•	•	•	•
NET DIALOG		1			•	•	•		•		•						•		•	•	•	•
DIALOG VISION	1	1	1		•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•
DIALOG PLUS		1	1		•	•	•	•	•	•	•					•	•		•	•	•	•
DIALOG PLUS RACK		1	1		•	•	•	•	•	•	•					•	•		•	•	•	•
DIALOG DUAL	1	1	1	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•
POWER DIALOG PLUS		1	1	•	•		•	•	•	•	•	•	•			•		•	•	•	•	•
MULTI DIALOG	2	1	•		•		•	•	•	•	•	•	•			•		•	•	•	•	•
MULTIPLUS	1	1	2	•		•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•
MASTER PLUS	2	2	•		•		•	•	•	•	•					•		•	•	•	•	•
MASTER DIALOG		1		•		•	•		•		•					•		•	•	•	•	•

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