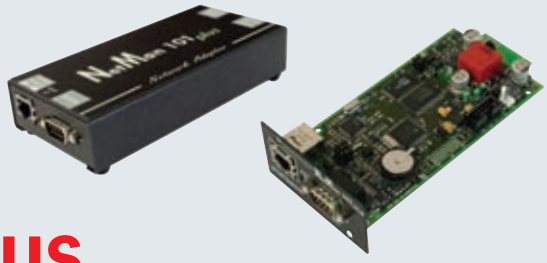


Network agent

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
- SNMP with RFC 3433 to manage the environmental sensors
- Integrated Web server for browser-based display
- TeleNetGuard modem compatible
- Firmware upgradeable through the serial port
- E-mail sent through SMTP server

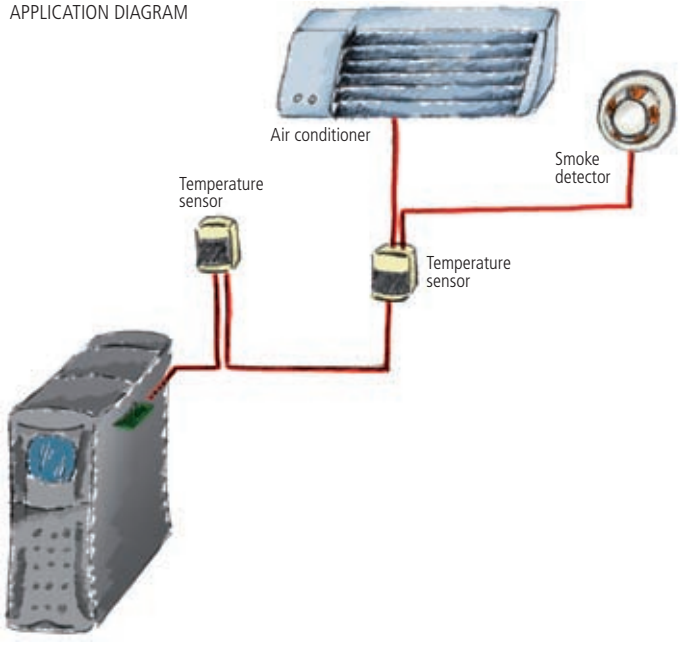
ENVIRONMENTAL SENSORS

The Netman environmental sensors monitor and record environmental conditions as well as activities in protected areas and at the premises where the UPS is installed.
The environmental sensors allow extensive control and management of the environment around the UPS by monitoring the temperature, humidity, triggering devices such as fans or locks and communicating the values via web, SNMP and via the PowerShield[3] software. PowerShield[3] software can be used to manage the status of the sensors in order to send messages. Please refer to PowerShield[3] software for further details. NetMan plus is able to handle a maximum of 6 separate sensors.
The environmental sensors are easy and fast to install thanks to their compact size and do not need external power supply.
The connected sensors are self-learning which makes their configuration both fast and intuitive.

The following sensors are available:
- Sensor for temperature: -55 +125 °C
- Sensor for temperature: -55 +125 °C and humidity: 0- 100%
- Sensor for temperature: -55 +125 °C and digital I/O: 0-12Vdc. In 1A max out 48Vdc

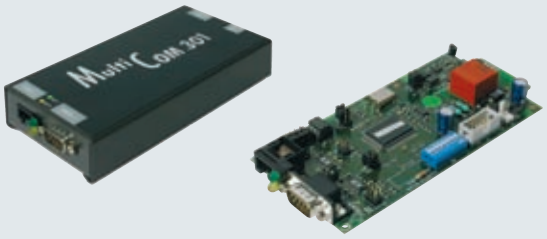
APPLICATION DIAGRAM

APPLICATION DIAGRAM



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

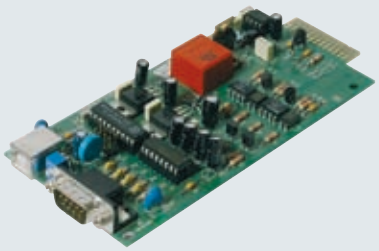
The MultiCOM 351/352 is a serial duplexer that allows two devices to be connected to a single serial port on a UPS.
It can be used where numerous serial connections and multiple UPS polling are required, and is ideal for LAN networks with a firewall.

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



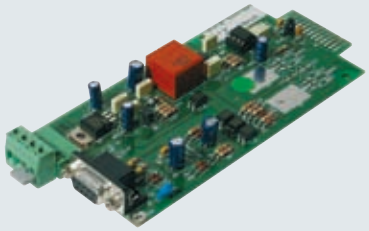
MultiCOM 362 provides a UPS with an additional RS232 serial interface or USB port. The USB port allows the UPS to communicate with Apple Macintosh computers as well as Windows and Linux operating systems.

Characteristics

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

Serial / EPO port

Multicom 372



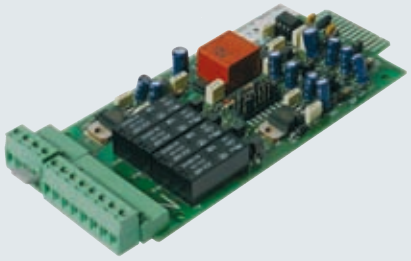
MultiCOM 372 provides a UPS with an additional RS232 serial interface port. The card has Emergency Power Off (EPO) and Remote Shut Down (RSD) inputs with terminal connections.

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

Multicom 401

The Multicom 401 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 0 to 99
- Profidrive V2 PP05
- Configurable baud rate from 9.6 kBit/s to 12 MBit/s
- 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