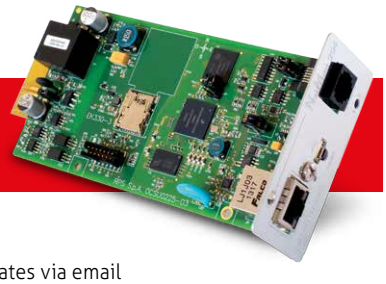
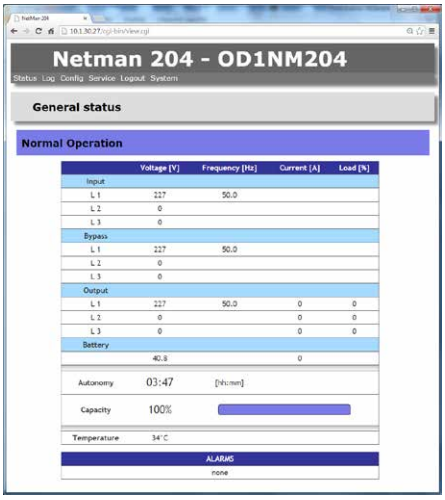
# Accessories

## NetMan 204

### CARD - ETHERNET - SNMP



The NetMan 204 network agent allows UPS directly connected over LAN 10/100 Mb connections to be managed using the main network communication protocols (TCP/IP, HTTP and SNMP). It is the ideal solution for the integration of UPS over Ethernet networks with MODBUS/TCP or BACNET/IP protocols. It was developed to integrate UPS into medium-sized and large networks, to provide a high level of reliability in communication between the UPS and associated management systems.




### Features

- 32bit RISC processor
- Compatible with 10/100 Mbps Ethernet and IPv4/6 networks
- wifi ready
- Compatible with PowerShield³ and TeleNetGuard
- SNMP v1 and v3 with RFC1628 for PowerNetGuard and NMS connection
- SNMP v1 and v3 with RFC3433 for the management of environmental sensors
- HTTP for UPS control via web browser
- SMTP for alarm notifications and UPS status updates via email
- MODBUS/TCP
- BACNET/IP
- Maximum expandability
- USB host for Pendrive USB connection
- Events log and data management
- Wake-on-LAN management for starting computers via TCP/IP network
- Other standards: DHCP, DNS, RARP, FTP, NTP, ICMP, IGMP
- Management of environmental sensors
- Configurable via Telnet or SSH sessions, and web
- Firmware upgradeable via USB port, FTP and HTTP.

## Environmental sensors

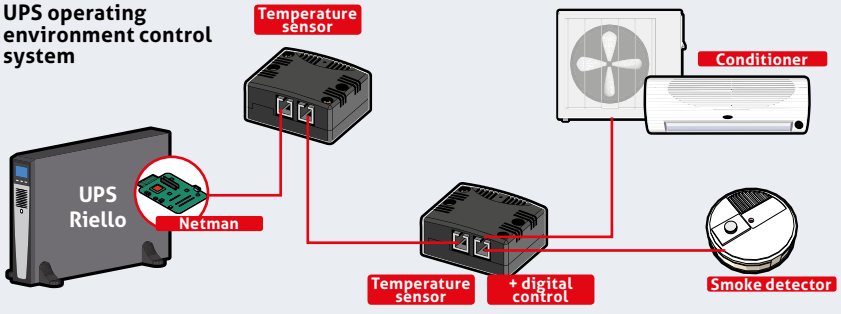
### FOR NETMAN 204

The NetMan environmental sensors are able monitor and record environmental conditions as well as activities in protected areas and the area where the UPS is installed. The environmental sensors allow management and control to be extended to cover the area around the UPS, monitoring the temperature and humidity and driving cooling fans or locks. Values are provided via Internet, SNMP and via PowerShield³ software.
PowerShield³ can be used to manage sensor operating states in order to send messages. Refer to PowerShield³ software documentation for further information.
NetMan can manage up to 6 separate sensors. Environmental sensors are quick to install thanks to their small footprint, and they do not require a separate external power supply. Thanks to the self-learning sensors, configuration is also rapid and intuitive.

**The following sensors are available:**

- **-55 +125 °C Temperature Sensor**
- **-55 +125 °C Temperature and 0-100% humidity Sensor**
- **-55 +125 °C Temperature and I/O digital 0-12 Vdc In, 1A max Out at 48 Vdc Sensor.**

**UPS operating environment control system**

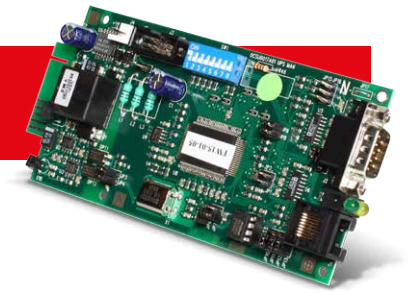




UPS Direct Ltd
Column House, London Road, Shrewsbury SY2 6NN England
Call: +44 (0)3456 445 002 Email: support@upsdirect.com Visit: www.upsdirect.com

# MultiCOM 302

## *CARD - MODBUS/JBUS INTERFACE*



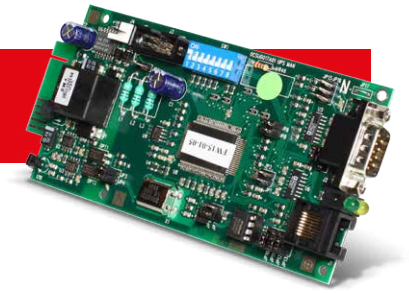
The MultiCOM 302 protocol converter allows UPS monitoring using the MODBUS/JBUS protocol over RS232 or RS485 serial lines.
In addition, it also manages a second independent RS232 serial line that can be used to connect to other devices such as the PLC or a PC running PowerShield³ software.

### Features

- Port configuration for MODBUS/JBUS as RS232 or RS485
- Management of two independent serial lines
- Suitable for integration with the main BMS management programs.

# MultiCOM 352

## *CARD - INTERFACE DUPLEXER*



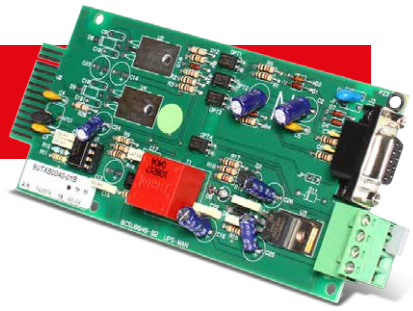
The MultiCOM 352 serial duplicator is an accessory that allows two devices to be connected to a single communication serial port on the UPS.
It can be used anywhere where several serial connections are required for multiple polling of the UPS. It is ideal for LAN networks with firewalls, where a high level of security is required, or for the management of separate LAN networks supplied by a single UPS.

### Features

- Cascading configuration giving a maximum of 4 serial communication ports
- LED communication flow indicator
- Firmware upgradeable via serial port.

# MultiCOM 372

## *CARD - RS232 INTERFACE*



The MultiCOM 372 allows an additional communication port to be added to the UPS to control and monitor the UPS via the RS232 serial line.
The board is supplied with an ESD (UPS Emergency Shutdown) input and an RSD (Remote Shutdown) input, both available on a removable terminal board and directly connectible to emergency buttons or other buttons.

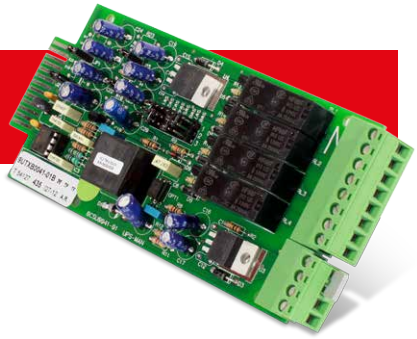
### Features

- Management of ESD input and UPS Shut-down
- Ability to supply devices at 12 V 80 mA max.

*For compatibility, refer to the Table on page 16*

# MultiCOM 382

## CARD - RELAY I/O INTERFACE



The MultiCOM 382 provides a set of relay contacts for managing UPS alarm notifications and operating states. The board has two removable terminal boards. One of these terminal boards includes the ESD (UPS Emergency Shut Down) and RSD (Remote Shut Down) signals.
The board also provides the possibility of associating Battery Working, Bypass, Alarm and Battery Low warnings with potential free changeover or normally open contacts.

### Features

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

*For compatibility, refer to the Table on page 16*

# MultiCOM 401

## BOX - PROFIBUS DP INTERFACE

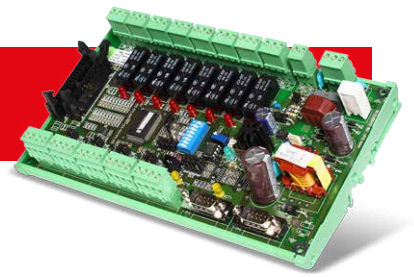

The MultiCOM 401 is an accessory that allows UPS to be connected to a Profibus DP network. The device integrates UPS management and monitoring in a control system based on a field bus that is among the most widely used in the industrial sector for communication between control / automation systems and distributed I/O.

### Features

- Profibus DP-V1 protocol
- Configurable addresses from 0 to 99
- Data format: Profidrive V2 PP05
- Communication speed configurable from 9.6 kBit/s to 12 MBit/s
- LED displaying the communication flow.

# Multi I/O

## BOX - RELAY I/O CARD & MODBUS/JBUS INTERFACE



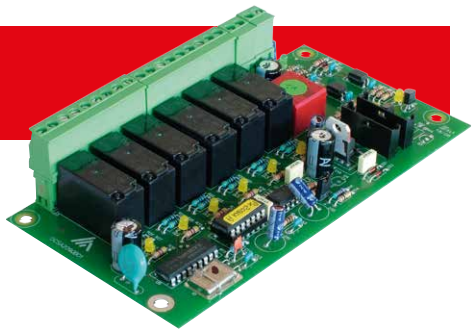
The Multi I/O is a device that integrates UPS into a control system using fully configurable input and output relay signals.
It can be used to connect two devices to a single UPS serial communication port.
It can be used anywhere where several serial connections are required for multiple polling of the UPS.
It can also communicate on RS485 lines using the MODBUS/JBUS protocol.

### Features

- 8 analogue/digital inputs
- 8 relay outputs (3A at 250Vac) that can be configured using UPS and input operating states
- Can communicate with UPS via RS232
- It can control two independent RS232/ RS485 serial lines to monitor the UPS and its operating states using the MODBUS/ JBUS protocol
- Firmware upgradeable via serial port.

# I/O

## EXPANSION BOARD



The I/O expansion board for the Master range is equipped with:

- 6 outputs with NC/NO potential-free contacts (250 V/5 A), electrically isolated from each other and from other circuits
- 2 self-powered inputs.

Each output or input can be configured with different meanings, using the associated menu.

*For compatibility, refer to the Table on page 16*

# Modem GSM

## MODEM

The GSM modem is able to send SMS messages detailing operating states and alarm warnings for devices monitored by PowerShield³ control software and PowerNetGuard supervision software.

# RTG 100

## GPRS MODEM


The GPRS RTG 100 terminal is able to manage UPS connected directly to the GSM mobile telephone network.
It was developed to integrate UPS into the TeleNetGuard remote control system for complete control of UPS and diagnostics in the event of failure
without the need for landline connections.
The RTG 100 is able to communicate constantly with UPS to provide the TeleNetguard remote control system or PowerShield³ software with a valid alternative to connection systems employing communication cables.

### Features

- Ability to send SMS messages detailing UPS operating states and alarms
- Compatible with PowerShield³ and TeleNetGuard
- Events log management
- Firmware upgradeable via GSM.

# Multi Panel

## *REMOTE DISPLAY INTERFACE*

The Multi Panel is a remote monitoring device that can provide a detailed UPS status overview in real time. This device is able to display mains power, output and battery readings as well as UPS operating states. The high visibility graphic display supports English, Italian, German, French, Spanish, Russian, Chinese and many other languages.
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 other independent serial lines can be used to connect devices such as the Netman 101 Plus or a PC running PowerShield³ software.


### Features

- High visibility LCD with graphic functions
- Management of three independent serial lines
- Port configuration for MODBUS/JBUS as RS232 or RS485
- Suitable for integration with the main BMS management programs
- Firmware upgradeable via serial port.

UPS DIRECT powerprotection

**UPS Direct Ltd**
Column House, London Road, Shrewsbury SY2 6NN England
Call: +44 (0)3456 445 002 Email: support@upsdirect.com Visit: www.upsdirect.com

# Multi Pass 10, 16, and 16-R

## *MAINTENANCE BYPASS*

The Multi Pass manual bypass cuts out UPS in the event of malfunction or breakage. Multi Pass ensures that the connected consumers are automatically switched to mains power if a UPS is switched off or goes into blocked status. Multi Pass is available for rack or wall installations (box).

### Features

- 16 A rack version
- 10 A and 16 A wall version
- Standard back-feed protection
- Automatic switching during mains failure
- Mains power present LED indicator
- Available with different socket standards (IEC, British socket, terminal boards).


# MBB32A

## *MAINTENANCE BYPASS*

Available in a 32 A single-phase configuration, enables UPS servicing up to 6kVA in a quick and safe manner ensuring power continuity. Equipped with a metal bracket for wall mounting.

# MBB100A

## *MAINTENANCE BYPASS*

Available in a single configuration that allows for manual bypass operations on any single-phase UPS from 10-20 kVA and three-phase UPS from 10-40 kVA. The device is equipped with three disconnect switches as shown in the attached diagram to allow for the complete isolation of the UPS in the event of maintenance or removal, whilst guaranteeing power supply continuity to the consumers. The device is equipped with a manual bypass closure warning micro-switch to be connected to the dedicated input on the UPS in order to prevent simultaneous supply from the manual bypass and inverter.

**RIELLO UPS offers a wide range of external bypasses and static switches for UPS up to 800 kVA, and for parallel systems up to 6.4 MVA.**


UPS DIRECT powerprotection

**UPS Direct Ltd**
Column House, London Road, Shrewsbury SY2 6NN England
Call: +44 (0)3456 445 002 Email: support@upsdirect.com Visit: www.upsdirect.com