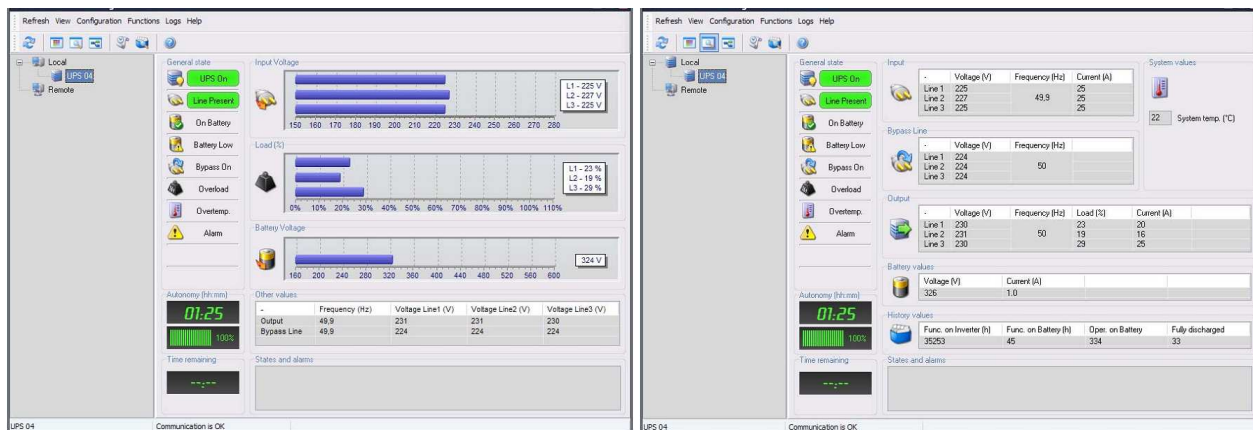


Watch&Save 3000 – Communication Software

Watch&Save 3000 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. Watch&Save 3000 has been developed with a client/server architecture that makes it flexible and easy to use, and provides multi-lingual and on-line support.



Characteristics

- Sequential and priority-based shutdown: Watch&Save 3000 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: Watch&Save 3000 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: Watch&Save 3000 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: Watch&Save 3000 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 blackouts occur.
- Integrated SNMP agent: Watch&Save 3000 features an integrated SNMP agent for management of the UPS. This agent is able to send all the UPS information and generate traps using the RFC 1628 MIB standard. This makes it possible to manage the UPS in compatible SNMP management stations such as HP Open View, Novell Managewise and IBM NetView.
- Wap server integrated: Watch&Save 3000 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 AROS 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.

Graphic Monitoring of UPS Status

Watch&Save 3000 is a simple but powerful AROS UPS management tool. There are various graphic versions for all the operating systems.

Detailed UPS Parameter Display

Watch&Save 3000 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

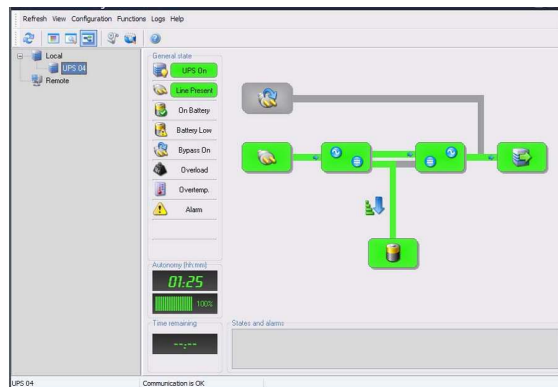
The user can select several options remotely: turn the UPS on or off, restart after a power loss and instigate a battery test.

Graphic Monitoring of UPS Status Version For Mac OS X

Watch&Save 3000 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. Watch&Save 3000 supports the NetMan Plus series of network agents and provides multi-language support.

Block and Functional Diagrams

Watch&Save 3000 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

Watch&Save 3000 can be configured to forward alarm messages automatically via e-mail, SMS, fax and voice.

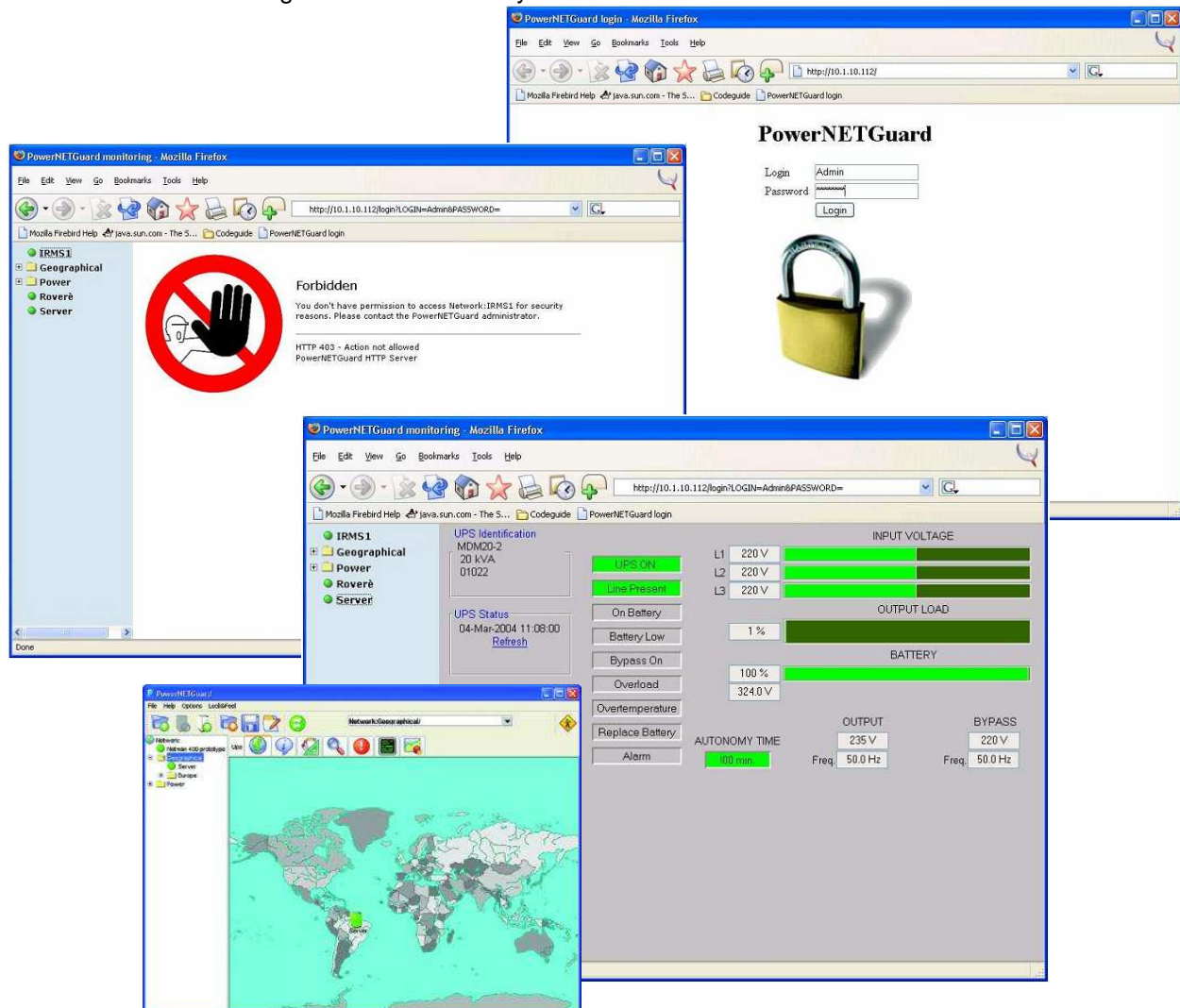
Operating systems supported

- 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
- Operating systems supported: Windows (98, ME, NT, 2000, 2003 and XP), Linux, Mac O X, Solaris 8 and 9

NetMan 101/102 Plus – Network Agent

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 Watch&Save 3000 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
- PowerNetGuard modem compatible
- Firmware upgradeable via the serial port
- E-mail sent through SMTP server

Environmental Sensors

The NetMan Plus 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 Watch&Save 3000 software. Watch&Save 3000 software can be used to manage the status of the sensors in order to send messages. Please refer to Watch&Save 3000 software for further details. NetMan plus is able to handle a maximum of 6 separate sensors.

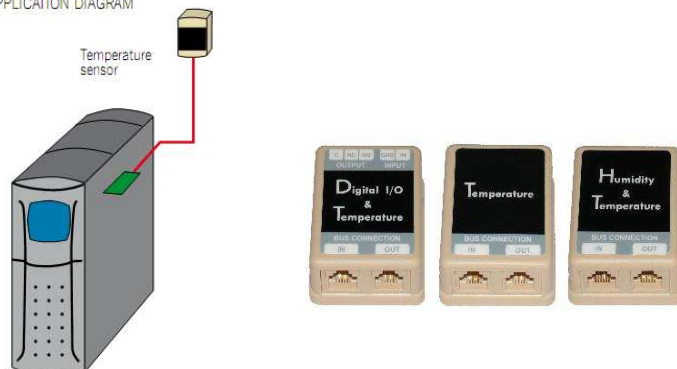
The environmental sensors are easy and fast to install thanks to their compact size and do not need external power supply.

The connected sensors are self-learning which makes their configuration both fast and intuitive.

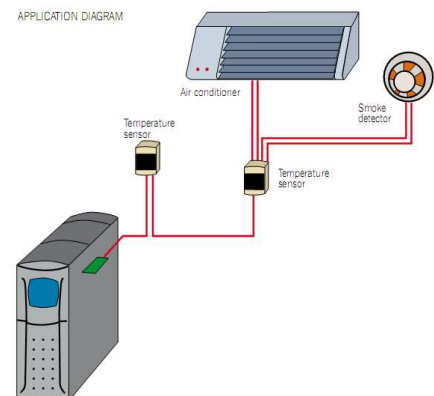
The following sensors are available:

- 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 and digital input / output (I/O): 0 ÷ 12 Vdc In 1A max out 48Vdc

APPLICATION DIAGRAM



APPLICATION DIAGRAM



MultiCom 301/302 – Protocol Converter

The MultiCom 301/302 protocol converter may be used to monitor the UPS using the MODBUS/JBUS protocol on RS485 or RS232 serial lines. It will also manage a second, independent RS232 serial line that can be used to connect other devices such as the Netman Plus 101 or a PC that uses the Watch&Save 3000 software.



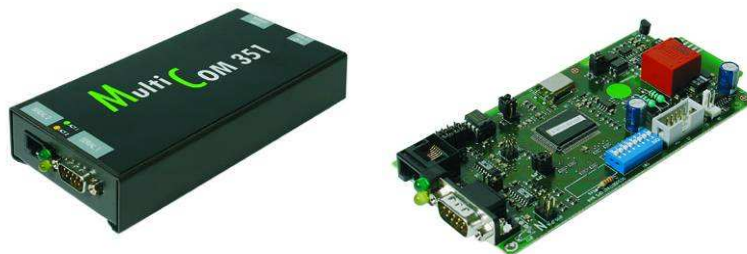
Characteristics

- 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

MultiCom 351/352 – Serial Link Duplexer

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

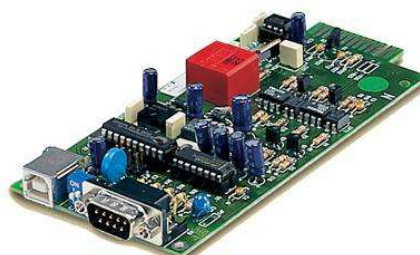
- Cascading configuration giving a maximum of 4 serial communication ports
- LED communication flow indicators
- Integrated Web server for browser-based display
- Firmware upgradeable through the serial port

MultiCom 362 – Serial / USB port

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 Watch&Save 3000



MultiCom 372 – Serial / ESD port

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

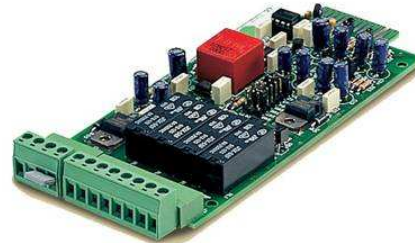


MultiCom 382 – Contacts / ESD Board

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 changeover or normally open.

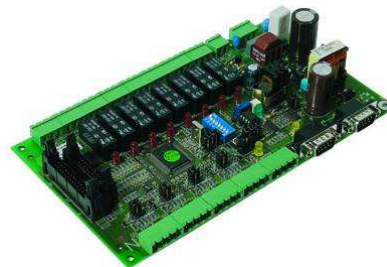
Characteristics

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



Multi I/O – Protocol Converter

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 Converter – USB Serial 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 1or 2
- Compatible with Watch&Save 3000



Multifunction I/O – Serial Link / Contacts Duplexer

Multifunction I/O is a Sentinel 6 range accessory with which you can associate the battery operation, bypass, alarm and battery depleted 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). The 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



MultiCom 401 – PROFIBUS

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 bitrate from 9.6 kBit/s to 12 MBit/s
- Led reporting the communication flow



KIT for AS400 and i-Series – Communication Kit



The IBM AS/400 has a single-level memory management feature that makes it compulsory for the system to be shut down in a controlled and orderly manner. Without UPS protection, the 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 AROS 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 AROS UPS ranges

Graphic Remote Panel

Graphic Remote Panel is a remote monitoring device that can provide a detailed UPS status overview in real time. It is compatible with all Aros UPS with RS232 and can display values for UPS specific input and output supplies, and battery set measurements. Graphic Remote Panel 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 Watch&Save 3000 software.



External Manual Bypass 16A

The Manual Bypass is a maintenance bypass to allow a UPS to be powered down and removed for service without disruption to the connected load(s). The External Manual Bypass is available in wall mounted or 19" rack mount formats.

Characteristics

- Wall or 19" rack mount versions
- Back-feed protection
- Manual and automatic transfer functions
- Mains power present LED indicator
- IEC, UK, Schuko and hard wired connected option)

