

# Falcon USHA SNMP/HTTP Agent

### Supports TCP/IPBased Remote UPS Monitoring & Management

### Advanced Features:

- \* Internet Based Remote UPS Monitoring & Management via LAN, WAN, Internet, PDA or WAP mobile phone
- \* Compatible with all Falcon SG, SSG, FN, FH & XG Series<sup>tm</sup> UPS Models
- \* Installs in Minutes Inside the Falcon UPS
- \* 10/100 Ethernet Connectivity
- \* Communicate via HTTP, SNMP & Telnet
- \* Automatic Notifications via Email or IP Trap Addresses
- \* Full Event & History Logging
- \* SNMPv3 Compliance & Multi-Level & User Security
- \* IPv4 & IPv6 Compliant
- \* RFC1628 & USHA MIBs Supplied For WIndows<sup>®</sup> & UNIX
- \* Remote Shutdown Client Software Provided with Unlimited License
- \* Compatible with Network Management Software (NMS)
- \* Java<sup>®</sup> Based Graphical Monitoring
- \* BOOTP, DHCP, WakeOnLAN & TFTP Updates Supported
- \* CE & FCC Compliant

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#### Easily Installs Into Falcon UPS Models

Falcon Electric's internal USHA SNMP/HTTP Agent facilitates remote UPS monitoring and management over any Ethernet LAN, Enterprise Network or the Internet. Simply install the agent board into the communications option slot of a Falcon SG, SSG, FN, FH or XG Series UPS and connect it to any Ethernet LAN. If a DHCP server is present, an IP address will automatically be assigned and you are ready to go. A static IP address may also be assigned to the agent. Enter the agent's IP address into any network connected web browser and the USHA's internal remote monitoring management website is displayed.

#### USHA, The Secure World-Wide Remote UPS Management Solution

The USHA agent provides the convenience and cost benefits of centralized remote UPS management. Whether your company has ten Falcon UPS units or ten thousand, they can all easily be managed and monitored from a single location on a single workstation.

In addition to the HTTP web interface, the USHA supports Simple Network Management Protocol (SNMP), allowing the use of any Network Management Software (NMS) with the installation of the suppled RFC1628 compliant MIB software.

The latest SNMPv3 level security has been incorporated. Both IPv4 and IPv6 IP addressing and security are also supported.

Your central workstation can be automatically notified of remote site power outages and events by listing management workstation's IP trap addresses, or by email.

# Safely Shut Down Multiple Servers or Workstations

Shutdown client software is supplied that allows for the orderly remote shutdown of multiple servers or workstations over your network. Just install the client software, set the shutdown delay time and enter the IP address of the controlling UPS's USHA agent.

Shutdown client software is provided for the following operating systems:

- \* WIndows<sup>®</sup> 9x/NT/2000/XP/2003 & Vista<sup>®</sup>
- \* SCO (OpenServer<sup>®</sup> & UnixWare<sup>®</sup>)
- \* Linux
- \* Novell NetWare®
- \* Sun Solaris<sup>®</sup> (SPARC and X86)
- \* HP UX®
- \* SCO® UNIX
- \* FreeBSD

All shutdown client software is shipped with the USHA agent board and may be installed on as many servers and workstations as desired without any additional licensing costs.

#### **Event & History Data Logging**

The USHA agent board stores power event and other important data in the following logs:

- \* UPS History Log
- \* UPS Extended Log
- \* UPS Event Log
- \* USHA Event Log

#### **Unattended Event Scheduling**

The USHA agent board supports the following programmed scheduling:

- \* UPS Battery Test Scheduling
- \* Weekly UPS Shutdown & Restore Events
- \* Special Day UPS Shutdown & Restore Events

### Advanced UPS Monitoring & Management Functions

For a full list of monitoring and management functions supported, please reference the USHA Agent specifications on the following page.

## **USHA SNMP/HTTP Agent Specification**

| Model Designation                           | USHA SNMP/HTTP Agent  |  |
|---|---|--|
| JPS Monitoring Functions                    |   |  |
| UPS Status                                  | On-line Mode, Bypass Mode or Alarm Mode                       |  |
| UPS Model                                   | Falcon UPS Model Designation                                  |  |
| UPS FIrmware Revision                       | Revision  |  |
| UPS Manufacturer                            | Falcon  |  |
| Current Utility Line Voltage                | AC Volts  |  |
| Minimum Utility Line Voltage, Last 1 Minute | AC Volts  |  |
| Maximum Utility Line Voltage, Last 1 Minute | AC Volts  |  |
| Current Utility Frequency                   | Hz  |  |
| UPS Output Voltage                          | AC Volts  |  |
| UPS Output Frequency                        | Hz  |  |
| UPS Output Load                             | % of UPS rated output   |  |
| UPS Output VA                               | VA  |  |
| Battery Capacity Remaining                  | % of battery capacity remaining                               |  |
| Current UPS Battery Voltage                 | DC Volts  |  |
| UPS Internal Temperature                    | Degrees (C or F)  |  |
| Next Scheduled UPS Off Time                 | dd/mm/yyyy  |  |
| Next Scheduled UPS On Time                  | dd/mm/yyy y   |  |
| UPS Input Voltage Rating                    | AC Volts  |  |
| UPS Output Voltage Rating                   | AC Volts  |  |
| UPS Battery Status                          | OK or Failed  |  |
| Time Since UPS was on Battery Power         | Seconds   |  |
| Battery Capacity Remaining                  | %   |  |
| Current Battery Voltage Per Cell            | DC Volts  |  |
| Battery Last Replaced Date                  | dd/mm/yyyy  |  |
| UPS Output Source                           | Normal, Battery o r Bypass                                    |  |
| Last Alarm Condition                        | Day, month, year, time and description of the alarm condition |  |
| Number of Connected Software Clients        | Integer   |  |
| JPS Programmable Functions                  |   |  |
| UPS Over Temperature Set Point              | Set in degrees C or F   |  |
| UPS Overload Set Point                      | Set in % of UPS output capacity                               |  |

| UPS Over Temperature Set Point    | Set in degrees C or F   |
|-----------------------------------|---|
| UPS Overload Set Point            | Set in % of UPS output capacity   |
| Last Battery Replace Dare         | Set dd/mm/yyyy  |
| UPS Shutdown Delay                | Set in seconds  |
| UPS Sleep Time                    | Set in minutes  |
| Battery Test Command              | None, Quick Test, Test Until Low Battery, Timed Test, Cancel Test, Clear Test |
| Battery Test Time                 | Minutes   |
| Scheduled UPS Battery Test        | dd/mm/yyy y and time  |
| UPS Shutdown Event Triggers       | AC Fail, Low Battery, Overload, Over Temperature, Scheduled                   |
| UPS Shutdown Event Trigger Action | Warning Only, Client Shutdown, UPS Shutdown                                   |
| Weekly Schedule Setup             | Shutdown and Restart Days and Times   |
| Special Day Schedule Setup        | Shutdown and Restart Days and Times   |

#### USHA Monitoring & Programmable Functions

| USHA System Date       | dd/mm/yyyy  | System Name              | User Text                                    |
|------------------------|---|--------------------------|--|
| USHA System Time       | hh:mm:ss  | System Contact           | User Text                                    |
| IP Address             | IPv4 or IPv6 formats  | System Location          | User Text                                    |
| Gateway Address        | IPv4 or IPv6 formats  | USHA Polling Rate        | Seconds                                      |
| Subnet Mast            | IPv4 or IPv6 formats  | USHA Baud Rate           | 2400 bps                                     |
| IP Auto Configure      | IPv6  | Default Language         | English or Chinese                           |
| Link-Local Address     | IPv6  | Default Temperature Unit | °C or °F                                     |
| Global Address         | IPv6  | BOOTP/DHCP               | Enable or Disable                            |
| Prefix Length          | IPv6  | Ping Echo                | Enable or Disable                            |
| Router Address         | IPv6  | Network Upgrade (UDP 69) | Enable or Disable                            |
| Telnet Connection      | Enable, Disable and TCP Port                                      | SNMP Support             | Enable, Disable and UDP Port                 |
| HTTP Support           | Enable, Disable and TCP Port                                      | SNMP Version             | SNMPv1 or SNMPv3                             |
| SNMP Trap Receivers    | NMS IP Address, User Name, Trap<br>Type, Severity and Description | SNMP/HTTP Access Control | NMS IP Address, Community<br>and Access Type |
| Home Page Refresh Rate | Battery, Input, Output, Alarm & Client<br>Groups                  | Wake On LAN Targets      | MAC Address, Repeat and<br>Interval times    |
| Email Notification     | Server, Account, Password, DNS &<br>Time                          | UPnP Support             | Enable or Disable                            |
| External Link Setup    | Link Address, Text and Ena ble or<br>Disable                      | Address Status           | IPv6   |

#### **USHA Agent Card T echnical Specification**

| CPU                   | 16-bits AC1106 Fast Ethernet RISC Processor Phoenix Kernel         |
|-----------------------|--|
| Memory                | 2MB (1Mbit x16) TFBGA Flash ROM                                    |
|                       | 2MB (1Mbit x16) SDRAM  |
| Serial Communications | Two UART Channels, one RJ -45, one Gold finger                     |
| LAN Controller        | 10/100 Mbit Ethernet controller                                    |
| Network Connection    | 10/100 TX RJ -45 jack connector                                    |
| RTC                   | Internal Real Time Clock   |
| UPS Protocol          | Megatec  |
| Network Protocols     | SNMP over UDP/IP, HTTP over TCP/IP, ARP, TFTP, SSH, SSL, NTP, ICMP |
| Supported MIB         | UPS MIB (RFC1628), USHA MIB  |
| Operating Temperature | 10°C to 40°C   |
| Operating Humidity    | 20-90% Non-condensing  |
| Size (H x W x D)      | 0.6" x 2.36" x 2.59" (15.2 mm x 60 mm x 65.8 mm)                   |
| Weight                | 1.41 ounces (40 gm)  |
| Regulatory Compliance | FCC Class B, CE C lass B   |

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