Advanced Features:

* Internet Based Remote UPS Monitoring & Management via LAN, WAN, Internet, PDA or WAP mobile phone

* Compatible with all Falcon SG, SSG and FN Series™ UPS Models

* Installs in Minutes Inside the Falcon UPS

* 10/100 Ethernet Connectivity

* Communicate via HTTP, SNMP and Telnet

* Automatic Notifications via Email or IP Trap Addresses.

* Full Event & History Logging

* SNMP v3 Compliance & Multi-Level & User Security

* IPv4 and IPv6 Compliant

* RFC1628 & USHA MIBs Supplied For Windows® & UNIX

* Remote Shutdown Client Software Provided with Unlimited License

* Compatible with Network Management Software (NMS)

* Optional Remote Monitoring of Temperature, Humidity, Alarm Contacts, Smoke, Vibration & Water Leak Detection

* CE & FCC Compliant

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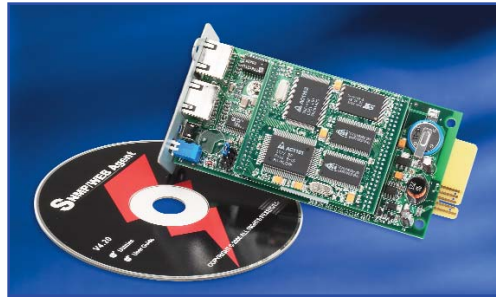
Easily Installs Into Most Falcon UPS Models

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 or FN 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 supplied RFC1628 compliant MIB software.

The latest SNMP v3 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® 9x/NT/2000/XP/2003, Vista, Windows® 7 & Server 2008
* SCO (OpenServer® & UnixWare®)
* Linux
* Novell NetWare®
* Sun Solaris® (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

Optional Advanced Remote Monitoring Devices

An optional EMD-HT remote temperature and humidity measurment interface module may be connected to the USHA card using the spare RS-232 RJ45 connector. The interface module supports connecting up to two additional sensors. The sensor options consists of magnetic switch contacts, smoke, water or vibration detectors.

Model Designation	USHA SNMP/HTTP Agent

UPS 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/yyyy
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 or Bypass
Last Alarm Condition	Day, month, year, time and description oft the alarm condition
Number of Connected Software Clients	Integer

UPS Programmable Functions

UPS Over Temperature Set Point	Set in degrees C or F
UPS Overload Set Point	Set in % of UPS output capacity
Last Battery Replace Date	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/yyyy 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 Type, Severity and Description	SNMP/HTTP Access Control	NMS IP Address, Community and Access Type
Home Page Refresh Rate	Battery, Input, Output, Alarm & Client Groups	Wake On LAN Targets	MAC Address, Repeat and Interval times
Email Notification	Server, Account, Password, DNS & Time	UPnP Support	Enable or Disable
External Link Setup	Link Address, Text and Enable or Disable	Address Status	IPv6

USHA Agent Card Technical 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	-20°C to 65°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 Class B

Optional Environmental Monitoring Device
(EMD)

Base EMD Device
Temperature & Humidity Montoring
(supports the connection of two additional sensors)

EMD Device
Interconnection Diagram
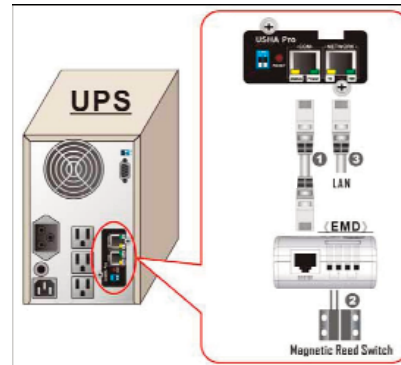
The EMD supports the following features:

* Real-time monitoring of temperature/humidity and other environmental conditions.

* Monitors the status of two additional sensor or contact devices. Sensors include, smoke, water, magnetic contacts amd vibration.

* Can be located away from the UPS and the install USHA Pro SNMP/HTTP agent using a "straight-through" CAT5 network cable up to 15m long.

* User programmable alarm thresholds allows custom temperature or humidity limits.

* Comprehensive environment conditions management and flexible configuration via a Web Browser, NMS (Network Management System), Java Applet, Telnet, SNMP or Hyper Terminal.

*Automatic event notification via E-mail and SNMP Trap.

* Regularly records and logs EMD parameters for statistical analysis and event diagnostics.

* Quick and easy installation (Hot-swappable).