



Intelligent Power Strips and Power Strip Controllers

Power Management Solutions

Alongside the delivery of reliable power to the network environment, issues of power management are also a key concern to the network manager: unauthorized use of power outlets, locked-up equipment, in-rush current, overloaded circuits, and the need of remote access to power outlets within a rack.

Sinetica addresses these concerns with a range of intelligent power strips that, coupled with Sinetica's Power-Hawk products, or Hawk-i, can provide remote power control and remote power monitoring over IP, providing the benefits of

- SNMP management (gets / sets / traps)
- Inbuilt web server
- Telnet communications.

Additionally, the power strips have terminal emulation, which is accessible via a KVM switch.

Uses of the intelligent power strip solutions include:

Power balancing

IT infrastructure managers can ensure that the individual phases available within the data centre are correctly balanced.

This helps prevent infrastructure failure and makes more efficient use of power delivery components such as UPS, generator, harmonic filters etc. This also enables the infrastructure to be matched to actual enterprise needs.

Power Availability check

Power is provided to the load point using normal power delivery equipment. This usually has a finite limit before a circuit breaker cuts in to prevent overloading and dropping the load (maybe your application servers!). This can be avoided by monitoring power closely.

Billing Stream

Monitoring KWhr enables certain organisations to bill their customers (Web hotels, hosting companies etc.) for consumed power thereby adding to their income revenues.

Remote Reboot & Power Control

Locked up or unresponsive equipment can be rebooted remotely, saving on site visits. In addition, the power strips can be used for sequenced start up of devices to prevent in-rush current.

Power Strip Features

- Fabricated from 1.2mm mild steel sealed in oven with matt black powder coat paint
- Max supported length of power strip: 48U
- All power strips fitted with earthing stud
- Fixing points: 6.5mm Diam holes on steel end bracket for bolting to cabinet frame
- Optional APC style compatible fixing also available
- 32Amp feed cable 4.0mm conductors, H07 Cable Type Terminated with 3-Pin 32A Commando 16Amp feed cable 1.5mm conductors, H05 cable Type terminated with 3-Pin 16A Commando

Supported outlet soc	kets:	
C13	Max rating	10Amp
C19	Max rating	16Amp
Shuko	Max rating	16Amp
UK13A	Max rating	13Amp

- Fusing/Indicators: Sockets may be individually fused, and/or individually Indicated with Neon lamps
- Whole strip may be ordered with Circuit breaker option (32A/16A) allowing all outlets to be isolated at the power strip
- Monitoring: 16 character by 2 row LCD showing; Volts, Current, kVA and kWHr Power factor and Frequency reading for the power strip
- Communication: RJ45 socket: RS232 to Sinetica Hawk-I, Hawk-i2, PowerHawk-2T, PowerHawk-TH; RJ45 socket: RS485 to Sinetica PowerHawk-2
- Control: Remote switching using Sinetica networking products maximum 24 individual switchable outlets, maximum switchable current 16A

SINETICA... understanding the data centre requirement.

Power, temperature, access control, and all other remote site monitoring needs.

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Powerhawk²

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The PowerHawk² is a compact device used to monitor up to 2 power strips within a rack enclosure, along with two input sensors (2x Temp, 2x Humidity, 2x Digital). The unit comprises both an SNMP interface and a secure web based interface for monitoring and management.

The PowerHawk² is a low cost unit suitable for the smallest Server Room through to the largest data centre, designed specifically to be used in the computer rack environment to monitor and control the power to the equipment within the rack, as well as monitoring the environmental parameters of temperature and humidity and other factors such as Door Open/Close, Water Sensing, Shock Sensing etc.



Power Strip monitoring

The unit will read the Voltage, Current and kVA reading from each connected strip and store the data in SNMP MIB objects, to be available to the Network Management System using the SNMP protocol. Thresholds for the monitored Voltage, Current and kVA may be set, and then if these thresholds are exceeded SNMP alarm traps will be transmitted to the NMS. Additionally, the power strip data may be viewed via HTML pages.

Environmental monitoring

Two auto-sensing analogue input ports are supported, allowing a temperature, humidity and digital probe to be used. Any combination of the two sensor types may be used – two temperature, two humidity, or one of each type. Thresholds may be set by the user, and alarms will be generated as SNMP traps if the thresholds are exceeded. Again, the environmental data may be viewed via HTML pages.

The unit also includes a D9 port to link to an optional LCD display module which allows the Sensor and PDU information to be displayed at the local rack.

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FEATURES

SNMP Monitoring and Control of 2 Power Strips and 2 channels of Temperature and/or Humidity and/or digital HTTP/HTTPS web interface for management and Power Strip Control Support for 5 Network Management Stations and 10 SNMP **Trap Receivers** Power Strip Monitoring of Volts, Amps, kWHr, KVA, PF and Hz Monitor and/or control 24 outlets per Power Strip 2 Sensor ports for Temperature, Humidity, Analogue Voltage or Open/Close Contact All Alarm Thresholds can be user defined and configured through the web interface or managed via SNMP Real Time Clock (RTC) with Battery Backup Optional Display unit for displaying sensor and power information outside the rack environment Support for 5 User logins with 3 levels, Administrator, Power Strip Controller and View Only

LDAP Login Support

TECHNICAL SPECIFICATIONS

Unit Dimensions	Height: 27mm Depth: 80mm Length:150mm Analogue Interfaces Temperature Range: 0oC ~ 70oC Humidity: 30%RH ~ 85%RH
Unit Connections	Power Connection: 6.3mm Power Jack, 12VDC @ 800mA Network: RJ45 with Link and Traffic Indicators Sensor Ports (2): RJ45 PDU Ports (2): RJ45
LED Indicators	Power Present: Green LED System Status: Green LED (Flashes at 1Hz to show unit alive) Alarm Indicator 1: Red LED (Under Sensor Port 1) Alarm Indicator 2: Red LED (Under Sensor Port 2) Network Link: Green LED (Embedded in RJ45 Socket)
Communications Interfaces	Network: 10/100 Base-T Ethernet PDU 1&2: RS232/RS485 Serial Port: RS232

Vat Reg. No. GB 542 8088 34 Reg. No. 2623558

Issue 1.1.

