

Secure Remote Power Control Unit with Environmental Monitoring

ENVIROMUX®

Securely control power on/off/reboot to a server, router, web cam, firewall or other remote devices over IP.

- Three operating modes for power reboot:
 - Manual – select the outlet and turn the power on/off.
 - Scheduled – set date/time/duration of power cycle.
 - Associated
 - ♦ Power on/off a device when a sensor goes out of range of a user-defined threshold.
 - ♦ Reboot (power cycle) and control power (on/off) to unresponsive IP devices that are connected to the IPDUs power outlets.
- Security: HTTPS, SSHv2, SSLv3, IP Filtering, LDAPv3, AES 256-bit encryption, 16-character username/password authentication, user account restricted access rights.
- Configure, control and monitor the unit via Web interface or Command Line Interface (CLI).
- Up to 3 additional IP aliases can be configured to allow remote control of the unit using different networks.
 - No scripts required - simply add the IP address, network mask, and gateway configurations through the web interface.
 - The first network (default network) will be used for total control of the unit, i.e. inbound and outbound connections.
 - The three other networks will allow web/SSH/telnet access only, i.e. inbound access only.
 - Up to four separate networks can be plugged into a network switch that is linked to the unit to facilitate the configuration.
- Supports two environmental sensors, including: temperature/humidity and water detection.
 - Shut down power when high temperature and other environmental threats are detected.
- Monitor (ping) up to eight IP network devices.
 - Unresponsive IP devices can be configured to trigger devices connected to the IPDUs power outlets to power on/off/reboot.
- Sends alert notifications via email, syslog, LEDs, Web page, and SNMP.
- Automatically configures network settings received from a connected DHCP server.
 - If a DHCP server is not found, the default static IP address will be used.
- Integrates with various Open Source monitoring packages - Nagios and MRTG.
 - The unit can be polled via SNMP.
- Meets the electrostatic discharge (ESD) immunity requirements of IEC/EN 61000-4-2
- Features Normally Open (NO) relay contacts.



IPDU-S2 (Front and Back)

- **Power on/off/reboot**
- **Configure up to 3 additional IP aliases that allow remote control of the unit through different networks**
- **Linux inside**
- **IPV 6 Compatible**
- **Shut down power when high temperature and other threats detected**

The ENVIROMUX® Secure Remote Power Control Unit allows you to remotely reboot and control power (on/off) to two servers or other powered devices from any location via secure web interface, RS232, SSH, or Telnet.

Specifications

Power

- 90 to 250 VAC at 50 to 60 Hz.
- Power consumption: 2.7W max
- Input Connector: IEC 320-C14 inlet
- Output Connectors: IEC 320-C13 outlets

Current Rating			
NTI Part #	In	Out	Location
IPDU-S2	10	10	All

RJ45 Sensor Ports

- Two RJ45 modular jacks for connecting NTI temperature/humidity and liquid detection sensors.

Network Interface

- One 10/100 Base-T Ethernet port with RJ45 Ethernet connector.

Console Port

- One female RJ45 port for terminal access.

Dimensions

- WxDxH: 6.12x5.55x1.4

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Specifications (Continued)

Environmental

- Operating temperature: 32 to 122°F (0 to 50°C).
- Storage temperature: -13 to 149°F (-25 to 65°C).

MTBF

- 183,724 hrs.

Protocols

- HTTPS, SSHv2, SSLv3, TLS, LDAPv3, AES 256-bit, 3DES, Blowfish, RSA, EDH-RSA, Arcfour, SNMPv2c; IP filtering, IPV6
- Operates and configures via HTTP/HTTPS web page, Telnet, SSH, or RS232 interface.
- Alerts are sent using email, syslog, and/or SNMP traps.
 - Alerts are posted in event log, which is accessible through Web user interface.

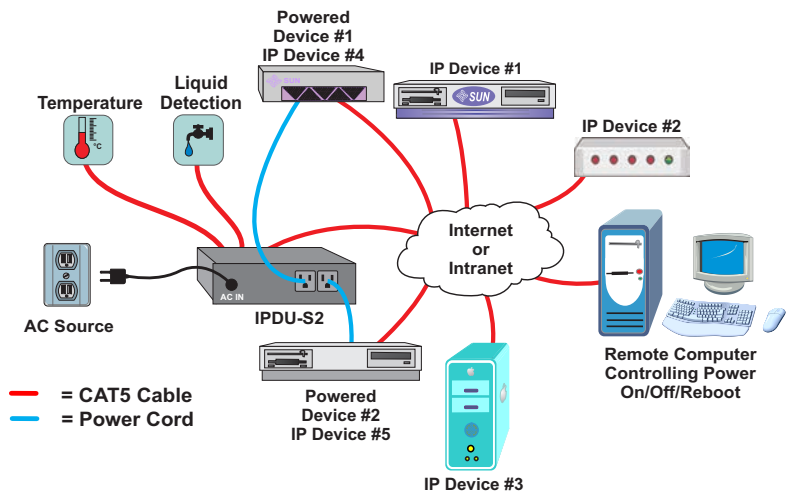
Regulatory Approvals

- CE, RoHS
- EN51055, EN50121-3-2

Warranty

- Two years

Configuration and Cable Illustration



Ideal for data centers, co-lo sites, web hosting facilities, telecom switching sites, POP sites, server closets, or any unmanned area that needs to be monitored

Control Methods

Web Interface

- Configure, control and monitor via HTTP/HTTPS webpage.
- Configure outlet operation settings, sensor thresholds and timing, alarm methods, alert formats, sensor/IP device outlet association, and system data log.
- Add up to 3 additional IP aliases that allow remote control of the unit through different networks.
 - No scripts required - simply add the IP address, network mask, and gateway configurations through the web interface.
 - The first network (default network) will be used for total control of the unit, i.e. inbound and outbound connections.
 - The three other networks will allow web/SSH/telnet access only, i.e. inbound access only.
- View outlet status, sensor values, IP device values, and alert status on one summary page.
 - View, Edit, Turn On/Off, Cycle buttons for each power outlet.
 - View and Edit sensors and IP devices.
- View entries stored in the system logs.
 - Event log records system events such as alerts, user login/logout, failed email messages, etc.
 - Data log records samples of sensor readings. User specifies sampling time period.
 - The log can be downloaded as a tab-delimited plain text file.
- Configure IP information, SMTP settings, SNMP settings, IP filtering, and user administrative settings.
- Administrate up to 15 users plus a root administrator.
- Configure permissions, schedule and alert methods for each user.

RS232/Telnet/SSH

- Configure, control and monitor over the text-based menu system accessible via RS232, Telnet, and SSH.
- Access is controlled via username/password.
 - System stores encrypted login information.
- Two user levels: user and administrator.

Front Panel LED Indicators

- “POWER” (green) – indicates device is powered.
- “OUTLET” (green / red) – outlet is on or off.
- “SENSOR FAULT” (red) – lights up if a sensor goes out of range of a configurable threshold.
- “IP FAULT” (red) – lights up if an IP device is unresponsive.

Network Operation

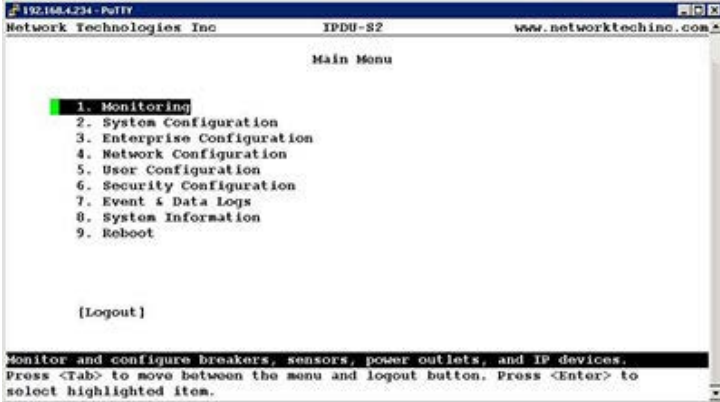
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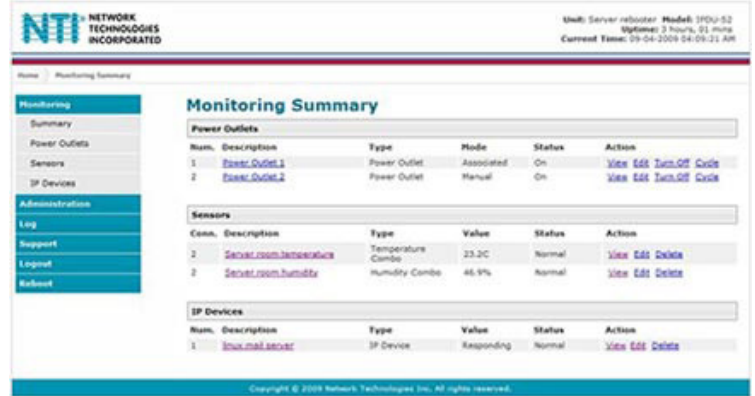
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Control Methods (Continued)



Secure Remote Power Reboot Text-Based Menu Interface Screen Shot



Secure Remote Power Reboot Web Interface Screen Shot

Secure Remote Power Control Unit Models

NTI Part #	# of Outputs	Input/Output Current Capacity	Relay Contacts	Location	Desktop Size WxDxH	Rack Size WxDxH
IPDU-S2	2	10A	Normally Open	All	6.1x5.55x1.4 in (155x140x35 mm)	NA