

open-e

ENTERPRISE LEVEL STORAGE OS
for EVERY BUSINESS

How to configure an SNMP-enabled Uninterruptable Power Supply with DSS V6



Easy to use, GUI based management provides performance and security.



Reliable disk based backup and recovery, along with Snapshot capability enable fast and reliable backup and restore.



Easy to implement remote Replication, at block or volume level, enables cost-effective disaster recovery.



IP based storage management combines NAS and iSCSI functionality for centralized storage and storage consolidation.

Software Version: DSS ver. 6.00 up10

Presentation updated: September 2010

www.open-e.com

How to configure an SNMP-enabled UPS

Example configuration with UPS ONLINE model XANTO S1500

Please read your UPS Web/SNMP Manager user manual and configure the IP address of the network adapter.
In this presentation, the UPS network adapter IP address will be set to 192.168.0.251.



TO CONFIGURE THE SNMP – ENABLED UPS, THE FOLLOWING STEPS NEED TO BE PERFORMED:

1. Configure the UPS Network Adapter
2. Configuring UPS support in DSS V6
3. Testing Online and On-Battery mode

NOTE:

You must be using DSS V6 up10 build 3719 or newer.

How to configure an SNMP-enabled UPS

1. Configure the UPS Network Adapter

The screenshot shows the web interface for the CS121 SNMP/Web Adapter. The browser address bar shows the URL <http://192.168.0.0.251/>. The page title is "CS121 SNMP/Web Adapter". The main content area is titled "Device Status: UPS STATUS OK". Below this, there are two main sections: "UPS Model & System Settings" and "Custom Values".

The "UPS Model & System Settings" section contains the following fields:

UPS Model:	XANTO S 1500	UPS ID:	0
Power (VA):	1500	System Name:	CS-121
Load (VA):	1500	System Location:	
Hold Time (min):	5	System Contact:	
Recharge Time (h):	8	Attached Devices:	UPS protected devices
Baud Rate:	2400	Battery Installation Date:	01.09.2007
Cable Type:	Serial	System Shutdown Time:	6 minutes

The "Custom Values" section contains six text input fields labeled Custom Text1 through Custom Text6.

The left sidebar contains the following menu items:

- CS121 Status
 - System & Network Status
 - Device Status
 - Device Functions
- Configuration
 - UPS Model & System
 - Network & Security
 - LED Sender
 - Scheduled Actions
 - SNMP
 - E-Mail
 - Timeserver
 - Events / Alarms
 - Save Configuration
- Logfiles
 - AlarmLog
 - DataLog
 - DataLog Chart
- Web Links
 - Online Manual
 - Firmware Update

Enter the WebGUI of the UPS network adapter. In the "UPS Model & System" section, set the UPS Model parameter to XANTO S1500.

How to configure an SNMP-enabled UPS

1. Configure the UPS Network Adapter

CS121 SNMP/Web Adapter - Mozilla Firefox

http://192.168.0.0.251/

CS121 SNMP/Web Adapter

Device Status: ● UPS STATUS OK

Network & Security Settings

MAC Address: 00-03-05-0F-2E-26

Network Card Speed:

Local Address:

Gateway Address:

Subnet Mask:

DNS Server:

Change Administrator Password:

Confirm Password:

Change UpsMon & SS4 Password:

Confirm Password:

Use UpsMon Password for Web Pages:

System Name:

System Location:

System Contact:

Attached Devices:

Enable Telnet Server:

Enable HTTP Server:

HTTP Port:

HTTP Refresh Time:

HTTP Default Page:

Enable HTTP Tooltips:

Enable UpsMon Server:

Use RCCMD2 Traps:

Enable RCCMD Listener:

RCCMD Listener Port:

RCCMD Timeout:

Enable SNMP Agent:

Use SNMP Authentication Traps:

Use SNMP Coldboot Traps:

SNMP Trap Version:

Static ARP Entries

Next, go to the “Network & Security” section and set the **SNMP Trap Version** parameter to 1.

1. Configure the UPS Network Adapter

Device Status: ● UPS STATUS OK

SNMP Settings

SNMP Communities			SNMP Trap Receivers	
Address	Community	Permission	Address	Community
1 192.168.0.220	public	ReadWrite	1 192.168.0.220	public
2 192.168.1.220	public	ReadWrite	2 192.168.1.220	public
3 0.0.0.0		Read only	3 0.0.0.0	
4 0.0.0.0		Read only	4 0.0.0.0	
5 0.0.0.0		Read only	5 0.0.0.0	
6 0.0.0.0		Read only	6 0.0.0.0	
7 0.0.0.0		Read only	7 0.0.0.0	
8 0.0.0.0		Read only	8 0.0.0.0	
9 0.0.0.0		Read only	9 0.0.0.0	
10 0.0.0.0		Read only	10 0.0.0.0	

Test SNMP Traps

You can send a powerfail trap and a power restored trap to the receivers defined below.
Please note: To test newly added receivers, you must save the configuration and reboot the CS121 first.

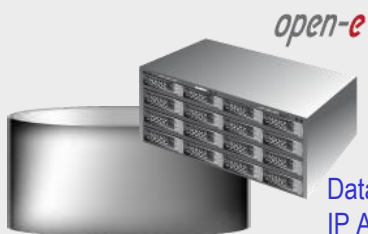
192.168.0.0.220 public
192.168.0.01.220 public

Apply

Test

Next, go to the “SNMP” section and enter the IP address of the DSS V6 server (you can enter more than one). Please enter **public** into the **Community** fields. In order to confirm the settings click the **Apply** button, then select „**Save Configuration**” in the left menu.

How to configure an SNMP-enabled UPS



Data Storage Software (DSS)
IP Address:192.168.0.220

2. Configuring UPS support in DSS V6

Enter the WebGUI of the DSS server, go to the „**SETUP**” menu and select „**hardware**”. In **UPS settings**, check the **Use UPS** box and select **MGE** as vendor. Next, select **UM-Link (SNMP)** as UPS model and enter its IP address into the **SNMP Host Agent Domain** field. In order to confirm the settings click the **apply** button.

The screenshot shows the open-e WebGUI interface for Data Storage Software V6. The navigation menu includes SETUP, CONFIGURATION, MAINTENANCE, STATUS, and HELP. The current page is 'SETUP > hardware'. The 'UPS settings' panel is active, showing the following configuration:

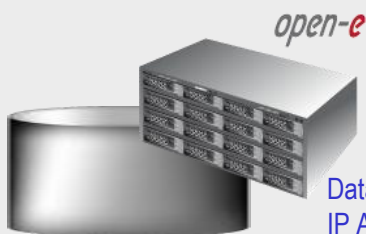
- Use UPS
- Set UPS vendor: APC MGE
- UPS mode: Single
- UPS model: UM-Link (SNMP)
- Port: Not a UPS (ref 66850)
- Timeout: 10 min.
- SNMP Host Agent Domain: 192.168.0.251
-

Below the UPS settings is the 'Time zone settings' panel:

- NTP servers: 1.pool.ntp.org
- Continuous adjusting using NTP
- Time zone: Europe/Berlin
-

At the bottom, the 'Set Time' panel shows Manual.

How to configure an SNMP-enabled UPS



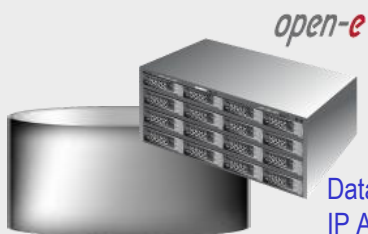
Data Storage Software (DSS)
IP Address:192.168.0.220

3. Testing Online and On Battery mode

Go to the „**STATUS**” menu and choose „**hardware**”. If the UPS is online and properly detected and configured, the **Status** parameter in **UPS status** will show **OL**.

A screenshot of the open-e Data Storage Software V6 web interface. The interface has a navigation menu with 'SETUP', 'CONFIGURATION', 'MAINTENANCE', 'STATUS', and 'HELP'. The 'STATUS' menu is selected, and the 'hardware' sub-menu is active. The main content area shows three panels: 'UPS status', 'Controllers info', and 'Drivers info'. The 'UPS status' panel displays 'Status: OL' and 'Battery charge: 100.0%' with a progress bar. A blue arrow points from the text box on the left to the 'OL' status. The 'Controllers info' panel lists network, RAID/SCSI, and fibre channel controllers. The 'Drivers info' panel lists network drivers. The footer shows 'Event Viewer' and 'Data Storage Software V6 - All rights reserved'.

How to configure an SNMP-enabled UPS



Data Storage Software (DSS)
IP Address:192.168.0.220

3. Testing Online and On Battery mode

In order to test the On-Battery mode, remove the main power cord from the UPS. Now, the **Status** parameter in **UPS status** should show **OB** (refresh the GUI page in your browser if needed). Then, reconnect the main power cord back to the UPS and refresh the GUI page – the **Status** parameter should show **OL** again.

The screenshot displays the open-e Data Storage Software V6 web interface. The top navigation bar includes 'SETUP', 'CONFIGURATION', 'MAINTENANCE', 'STATUS', and 'HELP'. The current page is 'STATUS' > 'hardware'. A 'UPS status' widget shows the following information:

- Status: OB
- Battery charge: 100.0%

An arrow points from the 'OB' status to the text in the blue box. Below the status widget, an event viewer window is open, showing a table of events:

Date	Event	✓
2009-10-16 23:09:41	UPS ups@localhost on... (0/2)	<input type="checkbox"/>
2009-10-16 23:06:56	UPS ups@localhost... (0/1)	<input type="checkbox"/>

A detailed view of the event 'UPS ups@localhost on battery' is shown in a separate window, displaying the date '2009/10/16 23:06:56' and the event description 'UPS ups@localhost on battery'. The event viewer also shows 'Pages: N/A', 'go to: 1', 'Show: 10', and 'Action: No messages selected'.

NOTE:
An event viewer prompt with “on battery” messages is shown here.

Thank you!