DELL UPS NMC



The Dell™ Network Management Card works with Dell UPS Management Software to monitor, manage, and protect uninterruptible power supplies (UPSs) through standard Web pages, SNMP protocol, and is secured by Secure Sockets Layer (SSL) security protocol. The Dell Network Management Card can support up to five connected browsers at a time, or three with SSL protocol.

CONFIGURE THE CARD VIA:

- Web browser
- · Local serial link (network parameters)
- Bootstrap Protocol/Dynamic Host Configuration Protocol (BOOTP/DHCP, network parameters)

FEATURES:

- · Simultaneous monitoring of up to five connected browsers (three in SSL)
- · Configuration of automatic e-mail message in response to UPS alarms and to transmit periodic reports
- · Control of UPS on/off switching with a Web browser
- Adjustment and control of load segments through the Web interface, including sequential starting of the installation and optimization of backup time by shutting down non-priority systems
- Automatic date and time adjustment through an NTP server
- · Protection by encrypted password
- · Protection by secure SSL connection
- Recording of events and measurements in the non-volatile memory
- · Languages available:
 - English
 - French
 - Spanish
 - German
 - Simplified Chinese
 - Japanese
 - Russian
 - Korean
 - Traditional Chinese
- · Content-sensitive help (English only)
- Card firmware updated through the network
- Connection to the card with straight CAT5 RJ-45 network cables [maximum card distance is 20m (65 ft)]
- Fast Ethernet 10/100 MB compatibility with auto-negotiation on the RJ-45 port
- Easy installation—the Dell Network Management Card can be installed while the UPS is online, maintaining the highest system availability
- Compatibility with the Internet Engineering Task Force (IETF) Management Information Base (MIB) and the Dell MIB. (Note: IETF MIB traps are not sent by the card.)

With the growth in distributed computing, computing and communication resources reside in multiple remote locations—and so do the uninterruptible power systems (UPSs) that protect them. Dell Network Management card enable you to monitor and control remote UPSs from Web browsers or industry-standard network management systems. Dell Network Management Card addresses a broad range of models, installation options (internal, external), real-time communications (Web, SNMP, or both), and network rates (10 Mbps, 100 Mbps, or both).

REAL-TIME MONITORING

Gain up-to-the-minute assurance that computing and communication systems are receiving the continuous, clean power they demand. Through easily navigable Web pages, network administrators can check system status and view critical meter information, such as input and output voltage, UPS load, battery voltage and condition, at any time.

VISIBILITY VIA THE WEB

Supports standard Web browsers, such as Internet Explorer. Displays also have been designed for simplified viewing using mobile phone or PDA (personal digital assistant) browsers—enabling systems managers to stay informed even when away from their mission-critical workstations and servers.

INTEGRATION WITH STANDARD SNMP MANAGEMENT SOFTWARE

You can use an industry-standard network management system (NMS)—such as Dell OpenManage, HP OpenView, IBM Director, Tivoli or CiscoWorks 2000—to monitor power conditions across the enterprise and to manage remote UPS systems and the operating systems they protect.

AUTOMATIC NOTIFICATION OF ALARM CONDITIONS

Send real-time alert notifications to designated recipients via e-mail, PCS mobile phone or pager, and via SNMP traps to an NMS or network messaging to customer provided software. Each recipient has the option of receiving real-time event messages, daily status reports based on criticality, containing data and event log files, or a combination of routine reports and event notifications.

FULL SUPPORT FOR UPS MIB AND BEYOND

For monitoring and managing remote UPSs through an NMS, Dell Network Management Card supports not only the standard UPS MIB (management information base) SNMP structure, but also Dell extensions to that MIB structure, which enable advanced functions that are not addressed in the RFC-1628 standard.

REMOTE ADMINISTRATION OF UPSS

From a Web browser or NMS, which may be hundreds or thousands of miles away, a system administrator can shut down or reboot a remote UPS, perform remote UPS battery tests, and set up scheduled shutdowns of UPSs and associated servers. The ability to shut down or restart systems without a site visit dramatically reduces field service expense and response time. Scheduled shutdowns can be devised to conserve power or tighten security during specific time periods, such as evenings or weekends.

ORDERLY SHUTDOWN OF REMOTE OPERATING SYSTEMS

When alarm conditions persist for a specified period, from 1 to xxx seconds, the Dell Network Management Card initiates orderly shutdown of affected equipment. [Needs edits...?????? Using NetWatch software (which is included with ConnectUPS products and loaded on the protected computers), up to 255 Windows, Novell, Macintosh, and UNIX/Linux computers can be gracefully shut down without operator intervention. This capability ensures data integrity during a power outage that exceeds UPS backup time.

The system manager automatically receives warning messages when (A) the UPS has shifted to battery power, (B) battery power is getting low or (C) orderly shut-down procedures are being initiated. You define exactly how to manage this shutdown—such as how long after going to battery power to begin shutdown, and how to stage the shutdown of servers by importance.

Supports individual control of load segments (groups of outlets), the Dell Network Management Card detects these load segments and provides the appropriate level of service to each, as configured by the system administrator.

TRACK AND RECORD DETAILED HISTORICAL DATA

Built-in data and event logs that track and record specific power-related occurrences over time, at user-defined increments as fine as one-minute intervals.

GRAPH HISTORICAL TRENDS FOR RAPID ANALYSIS

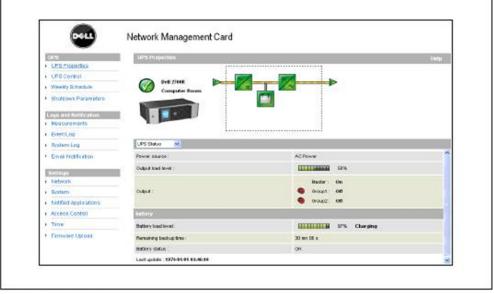
A JAVA applet graphs data and event log values over time, making it easy to analyze chronic power problems and identify trends and cause-and-effect relationships. Zoom and data masking functions pinpoint specific anomalies for further investigation. Text-based event logs contain easy-to-understand event descriptions with corre-sponding date and time stamp.

IN-SERVICE INSTALLATION AND UPGRADES

Cards can be installed without interrupting critical loads, and can be easily updated over network connections. A simple network-based utility is used to discover and update multiple cards on the network using Dell UPS Management software to implement discovery.



Technical Specifications	
Network Connection	10/100BaseT RJ-45 network connector
UPS Protocol	Dell UPS proprietary protocol
Network Protocols (not limited to)	DHCP DNS HTTP/HTTPS NTP SMTP SNMP v1 TCP/IP
Supported SNMP MIBs	Dell UPS MIB IETF UPS MIB RFC 1213 MIB II
Operating Temperature	0° C to 40° C (32° F to 104° F)
Storage Temperature	⁻ 15° C to 60° C (5° F to 140° F)
Ambient Humidity	90% RH maximum without condensation
Power Consumption	1.5 watts maximum
Size (L x W x H)	132 mm x 66 mm x 42 mm (5."2 x 2.6" x 1.6")
Weight	70g (2.5 oz)
EMC Statements	Safety for ATI: IEC/EN 60950–1 2002 Safety for UPS: IEC/EN 62040–1–1 EMC: EN 61000–6–2 (2002), EN 61000–6–3 (2002), IEC/EN 62040–2 (2002)/C1/C2 For European directives: Low voltage: 2006/95/EC EMC: 2004/108/EC
ROHS	100% compatible



Type: Ethernet, Internet connectivity device

Installation: Hot-plug

Web Browser support: Internet Explorer, Firefox

Software support: Dell UPS Software

Additional features: Firmware updated through the network

