

### Overview

#### Models

HP U200-S UTM Appliance

JD273A

HP U200-A UTM Appliance

JD275A

#### Key features

- Flexible security zone and virtual firewall
- Advanced VPN
- Comprehensive threat protection
- Antivirus, antispam, and URL filtering options
- Intelligent Web-based management

#### Product overview

The HP U200 Unified Threat Management (UTM) Appliance Series comprises a group of purpose-built security devices designed to provide comprehensive protection for distributed environments such as branch offices and remote sites. Utilizing a state-of-the-art multicore platform and advanced hardware acceleration, the U200 UTM appliance series delivers robust protection against malicious attacks that could compromise networks and their critical assets. Sharing the same proven technology as the HP VPN Firewall Module Family, the U200 UTM appliance series provides protection against known threats such as malware and denial-of-service (DoS) attacks while providing optional services such as antivirus, antispam, and URL filtering capabilities. This provides manageable, flexible security options for organizations and their unique deployment needs.

#### Features and benefits

##### Application highlights

- **Enhanced firewall functions:** provide basic functions such as security zone configuration, static/dynamic blacklist, MAC-IP binding, and ACL application; offer enhanced functions like status-based filtering, virtual firewall, and transportation of IEEE 802.1Q-tagged packets; protect the network against attacks from ARP spoofing, invalid TCP flag, large ICMP packets, Challenge Collapsar (CC), SYN flooding, and address/port scanning
- **Abundant VPN features:** HP U200 UTM appliances support access through L2TP VPN, GRE VPN, and IPSec VPN and SSL VPN; the integrated hardware encryption engine implements VPN handling of high performance
- **Zone-based access policies:** logically groups virtual LANs (VLANs) into zones that share common security policies; allows both unicast and multicast policy settings by zones instead of by individual VLANs
- **Application-level gateway (ALG):** deep packet inspection in the firewall discovers the IP address and service port information embedded in the application data; the firewall then dynamically opens appropriate connections for specific applications
- **Full support of NAT applications:** HP U200 UTM appliances support NAT applications, including many-to-one, many-to-many, static NAT, dual translation, easy IP, and DNS mapping; support NAT traversal with multiple protocols, and deliver NAT ALG functions such as DNS, FTP, H.323, and NBT
- **Real-time antivirus:** HP U200 UTM appliances adopt Kaspersky's antivirus engine to detect and remove codes of malicious attacks in a timely manner
- **Real-time spam filtering:** HP U200 UTM appliances filter spam in real time, which purifies mail systems
- **URL filtering:** HP U200 UTM appliances implement user-based URL access control to deny access to unauthorized websites
- **Enterprise-class high availability:** dual-box failover protects against loss of connectivity due to hardware failure, with automatic configuration and state table synchronization to simplify administration and remove scope for security policy inconsistencies

### Overview

#### Management

- **Complete session logging:** provides detailed information for problem identification and resolution
- **Manager and operator privilege levels:** enable read-only (operator) and read/write (manager) access on CLI and Web browser management interfaces
- **Secure Web GUI:** provides a secure, easy-to-use graphical interface for configuring the module via HTTPS
- **Command-line interface (CLI):** provides a secure, easy-to-use command-line interface for configuring the module via SSH or a switch console; provides direct real-time session visibility
- **SNMPv1, v2c, and v3:** facilitate centralized discovery, monitoring, and secure management of networking devices
- **Remote monitoring (RMON):** uses standard SNMP to monitor essential network functions; supports events, alarm, history, and statistics group plus a private alarm extension group
- **FTP, TFTP, and SFTP support:** FTP allows bidirectional transfers over a TCP/IP network and is used for configuration updates; Trivial FTP is a simpler method using User Datagram Protocol (UDP)

#### Warranty and support

- **1-year warranty:** with advance replacement and 30-calendar-day delivery (available in most countries)
- **Electronic and telephone support:** limited electronic and telephone support is available from HP; to reach our support centers, refer to [www.hp.com/networking/contact-support](http://www.hp.com/networking/contact-support); for details on the duration of support provided with your product purchase, refer to [www.hp.com/networking/warrantysummary](http://www.hp.com/networking/warrantysummary)
- **Software releases:** to find software for your product, refer to [www.hp.com/networking/support](http://www.hp.com/networking/support); for details on the software releases available with your product purchase, refer to [www.hp.com/networking/warrantysummary](http://www.hp.com/networking/warrantysummary)

### Technical Specifications

#### HP U200-S UTM Appliance (JD273A)

<b>Ports</b>	1 RJ-45 serial console port 5 auto-negotiating 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T) 1 Compact Flash port 1 module slot										
<b>Physical characteristics</b>	<table border="0"> <tr> <td style="vertical-align: top;"><b>Dimensions</b></td> <td>11.81(w) x 10.59(d) x 1.72(h) in (30 x 26.9 x 4.36 cm) (1U height)</td> </tr> <tr> <td style="vertical-align: top;"><b>Weight</b></td> <td>5.51 lb (2.5 kg)</td> </tr> </table>	<b>Dimensions</b>	11.81(w) x 10.59(d) x 1.72(h) in (30 x 26.9 x 4.36 cm) (1U height)	<b>Weight</b>	5.51 lb (2.5 kg)						
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<b>Weight</b>	5.51 lb (2.5 kg)										
<b>Memory and processor</b>	512 MB DDR2 SDRAM										
<b>Performance</b>	<b>MAC address table size</b> 4000 entries										
<b>Environment</b>	<table border="0"> <tr> <td style="vertical-align: top;"><b>Operating temperature</b></td> <td>32°F to 113°F (0°C to 45°C)</td> </tr> <tr> <td style="vertical-align: top;"><b>Operating relative humidity</b></td> <td>10% to 95%, noncondensing</td> </tr> </table>	<b>Operating temperature</b>	32°F to 113°F (0°C to 45°C)	<b>Operating relative humidity</b>	10% to 95%, noncondensing						
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<b>Notes</b>	Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.										
<b>Safety</b>	IEC 60950-1, Second Edition; UL60950-1, First Edition; EN60950-1, First Edition										
<b>Emissions</b>	VCCI Class B; EN 55022 Class B; ICES-003 Class B; FCC Part 15, Class B; EN 61000-3-2; EN 61000-3-3										
<b>Management</b>	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager; Telnet; HTTPS; FTP; Support HP A-IMC UTM Manager Software as unified management platform										
<b>Notes</b>	<p>Performance</p> <ul style="list-style-type: none"> <li>• 200 Mbps firewall throughput</li> <li>• 60,000 concurrent connections under firewall mode/16,000 concurrent connections under UTM mode</li> <li>• 6,000 new connections per second under firewall mode/2,000 new connections per second under UTM mode</li> <li>• 1,000 security policies</li> <li>• 100 Mbps 3DES/AES VPN throughput</li> <li>• 100 IPSec tunnels</li> <li>• 30 Mbps antivirus throughput</li> </ul>										
<b>Services</b>	Refer to the HP website at: <a href="http://www.hp.com/networking/services">www.hp.com/networking/services</a> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.										

### Technical Specifications

#### HP U200-A UTM Appliance (JD275A)

<b>Ports</b>	RJ-45 serial console port 6 auto-negotiating 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T) 1 Compact Flash port 2 module slots	
<b>Physical characteristics</b>	<b>Dimensions</b>	17.4(w) x 16.06(d) x 1.74(h) in (44.2 x 40.8 x 4.42 cm) (1U height)
	<b>Weight</b>	8.82 lb (4 kg)
<b>Memory and processor</b>	1 GB DDR2 SDRAM	
<b>Performance</b>	<b>MAC address table size</b>	4000 entries
<b>Environment</b>	<b>Operating temperature</b>	32°F to 113°F (0°C to 45°C)
	<b>Operating relative humidity</b>	10% to 95%, noncondensing
<b>Electrical characteristics</b>	<b>Voltage</b>	100-240 VAC
	<b>Current</b>	2.5 A
	<b>Maximum power rating</b>	100 W
	<b>Frequency</b>	50 / 60 Hz
	<b>Notes</b>	Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.
<b>Safety</b>	IEC 60950-1, Second Edition; UL60950-1, First Edition; EN60950-1, First Edition	
<b>Emissions</b>	VCCI Class B; EN 55022 Class B; ICES-003 Class B; FCC Part 15, Class B; EN 61000-3-2; EN 61000-3-3	
<b>Management</b>	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager; Telnet; HTTPS; FTP; Support HP A-IMC UTM Manager Software as unified management platform	
<b>Notes</b>	Performance <ul style="list-style-type: none"> <li>• 800 Mbps firewall throughput</li> <li>• 500,000 concurrent connections under firewall mode/100,000 concurrent connections under UTM mode</li> <li>• 10,000 new connections per second under firewall mode/5,000 new connections per second under UTM mode</li> <li>• 10,000 security policies</li> <li>• 400 Mbps 3DES/AES VPN throughput</li> <li>• 1000 IPsec tunnels</li> <li>• 100 Mbps antivirus throughput</li> </ul>	
<b>Services</b>	Refer to the HP website at <a href="http://www.hp.com/networking/services">www.hp.com/networking/services</a> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.	

#### Standards and protocols (applies to all products in series)

**IPv6**  
RFC 1981 IPv6 Path MTU Discovery  
RFC 2460 IPv6 Specification  
RFC 2465 Management Information Base for IP Version

#### VPN continued

RFC 2405 The ESP DES-CBC Cipher Algorithm With Explicit IV  
RFC 2406 IP Encapsulating Security Payload (ESP)  
RFC 2410 The NULL Encryption Algorithm and Its Use

### Technical Specifications

6: Textual Conventions and General Group (partially support, only "IPv6 Interface Statistics table")  
 RFC 3484 Default Address Selection for IPv6  
 RFC 3513 IPv6 Addressing Architecture  
 RFC 3587 IPv6 Global Unicast Address Format  
 RFC 4007 IPv6 Scoped Address Architecture  
 RFC 4862 IPv6 Stateless Address Auto-configuration

#### Security

RFC 1321 The MD5 Message-Digest Algorithm  
 RFC 1334 PPP Authentication Protocols (PAP)  
 RFC 1994 PPP Challenge Handshake Authentication Protocol (CHAP)  
 RFC 2104 Keyed-Hashing for Message Authentication  
 RFC 2138 RADIUS Authentication  
 RFC 2618 RADIUS Authentication Client MIB  
 RFC 2620 RADIUS Accounting Client MIB  
 RFC 2716 PPP EAP TLS Authentication Protocol  
 RFC 2865 RADIUS Authentication  
 RFC 2866 RADIUS Accounting  
 RFC 2867 RADIUS Accounting Modifications for Tunnel Protocol Support  
 RFC 2868 RADIUS Attributes for Tunnel Protocol Support  
 RFC 2869 RADIUS Extensions  
 draft-grant-tacacs-02 (TACACS)

#### VPN

RFC 1701 Generic Routing Encapsulation (GRE)  
 RFC 1702 Generic Routing Encapsulation over IPv4 networks.  
 RFC 1828 IP Authentication using Keyed MD5  
 RFC 1829 The ESP DES-CBC Transform  
 RFC 1853 IP in IP Tunneling  
 RFC 2085 HMAC-MD5 IP Authentication with Replay Prevention  
 RFC 2401 Security Architecture for the Internet Protocol  
 RFC 2402 IP Authentication Header  
 RFC 2403 The Use of HMAC-MD5-96 within ESP and AH  
 RFC 2404 The Use of HMAC-SHA-1-96 within ESP and AH

With IPsec  
 RFC 2411 IP Security Document Roadmap  
 RFC 2451 The ESP CBC-Mode Cipher Algorithms  
 RFC 2473 Generic Packet Tunneling in IPv6 Specification  
 RFC 2529 Transmission of IPv6 over IPv4 Domains without Explicit Tunnels  
 RFC 2661 Layer Two Tunneling Protocol "L2TP"  
 RFC 2784 Generic Routing Encapsulation (GRE)  
 RFC 2868 RADIUS Attributes for Tunnel Protocol Support  
 RFC 2893 Transition Mechanisms for IPv6 Hosts and Routers  
 RFC 3602 The AES-CBC Cipher Algorithm and Its Use with IPsec  
 RFC 4214 Intra-Site Automatic Tunnel Addressing Protocol (ISATAP)

#### IKEv1

RFC 2407 The Internet IP Security Domain of Interpretation for ISAKMP  
 RFC 2408 Internet Security Association and Key Management Protocol (ISAKMP).  
 RFC 2409 The Internet Key Exchange (IKE)  
 RFC 2412 The OAKLEY Key Determination Protocol  
 RFC 3526 More Modular Exponential (MODP) Diffie-Hellman groups for Internet Key Exchange (IKE)  
 RFC 3706 A Traffic-Based Method of Detecting Dead Internet Key Exchange (IKE) Peers

#### PKI

RFC 2510 Internet X.509 Public Key Infrastructure Certificate Management Protocols  
 RFC 2511 Internet X.509 Certificate Request Message Format  
 RFC 3279 Algorithms and Identifiers for the Internet X.509 Public Key Infrastructure Certificate and Certificate Revocation List (CRL) Profile  
 RFC 3280 Internet X.509 Public Key Infrastructure Certificate and Certificate Revocation List (CRL) Profile  
 draft-nourse-scep-06:  
 PKCS#1  
 PKCS#10  
 PKCS#12  
 PKCS#7

### Features

### Operating mode

### L2TP VPN



### Technical Specifications

Routing mode  
Transparent mode  
Hybrid mode

#### AAA services

RADIUS authentication  
HWTACACS authentication  
PKI/CA (x.509 format) authentication  
Domain authentication  
CHAP authentication  
PAP authentication

#### Firewall

Virtual firewall  
Security zone configuration  
Basic and extended ACLs  
Interface-based access control  
Time range-based access control  
Dynamic packet filtering  
ASPF packet filtering  
Static and dynamic blacklists  
MAC-IP binding  
MAC-based access control  
Transportation of 802.1Q-tagged packets

#### Anti virus

Virus definition-based detection  
Library upgrading manually and automatically  
Flow handing mode  
Supporting protocols of HTTP, FTP, SMTP, and POP3.  
Preventing virus types of Backdoor, Email-Worm, IM-Worm, P2P-Worm, Trojan, AdWare, Virus  
Supporting virus logs and reports

#### URL filtering

Custom-defined URL filtering library  
Supporting Java Blocking and ActiveX Blocking

#### Mail filtering

Blacklist of IP addresses  
Matching keywords of the mail address, attachment name, content, sender, and receiver

#### Security logs and statistics

User behavior flow logs  
NAT translation logs  
Real time logs of attacks  
Blacklist logs  
Address binding log  
Traffic alarm logs  
Traffic statistics and analysis

LNS, LAC  
L2TP Multi-instance

#### GRE VPN

#### IPSec/IKE

AH/ESP protocols  
Manual SA setup or through IKE  
ESP supports encryption algorithms of DES, 3DES, AES  
Algorithms of MD5 and SHA-1  
IKE main mode and aggressive mode  
NAT traversal  
DPD detection

#### IP services

IPv4/v6  
ARP  
Domain name resolution  
IP unnumbered  
DHCP relay  
DHCP server  
DHCP client

#### IP routing

Static routing  
RIP v1/2  
OSPF  
BGP (only for U200-A)  
Policy routing

#### High reliability (only for U200-A)

Active/Active mode  
Active/Passive mode  
Session Synchronization for Firewall

#### Attack prevention

DDoS  
DNS query/SYN/ICMP/UDP/ARP flood  
SYN cookie proxy SQL injection filtering  
IP/MAC binding  
IP spoofing detection  
ARP reverse query checking  
Management interfaces disabled by default

#### System and administration

Web interface via HTTP/HTTPS  
Command line interface via console, telnet, SSH  
RADIUS/TACACS+ server and local database authentication  
DNS support for dynamic IP allocation

### Technical Specifications

Global/security zone-based connection rate monitoring  
Global/security zone-based protocol packet rate monitoring  
Events statistics  
E-mail notification of real-time alarms  
Information distribution through E-mail

#### **NAT**

NAPT  
PAT  
NAT Server  
Port mapping  
Bidirectional NAT  
Static NAT

SNMP v1, 2c and 3

#### **IPv6 Routing & Multicast**

RIPng  
OSPFv3  
BGP4+ (only for U200-A)  
Static Route  
policy Route  
PIM-SM/DM

#### **IPv6 Security**

NAT-PT  
Manual tunnel  
IPV6 OVER IPv4 GRE tunnel  
6to4 tunnel (RFC3056)  
ISATAP Tunnel  
IPv6 Packet Filter  
Radius  
NAT64

### Accessories

<b>Memory</b>	HP X600 1G Compact Flash Card	JC684A
	HP X600 512M Compact Flash Card	JC685A
	HP X600 256M Compact Flash Card	JC686A

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<b>HP U200-S UTM Appliance (JD273A)</b>	HP U200-S 2-port Gig-T Module	JD265A
	HP U200-S 1-year Anti-Virus Service License	JG076A
	HP U200-S 1-year Anti-Spam Service LTU	JG075A
	U200-S 1-year URL Filter Service LTU	JG078A

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<b>HP U200-A UTM Appliance (JD275A)</b>	HP U200-A 2-port Gig-T Module	JD266A
	HP U200-A 4-port GbE SFP Module	JD267A
	HP U200-A 1-year Anti-Spam Service License	JG064A
	HP U200-A 1-year Anti-Virus Service LTU	JG065A
	HP U200-A 1-year URL Filter Service LTU	JG067A

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To learn more, visit: [www.hp.com/networking](http://www.hp.com/networking)

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