

ProCurve Secure Router 7000dl Series

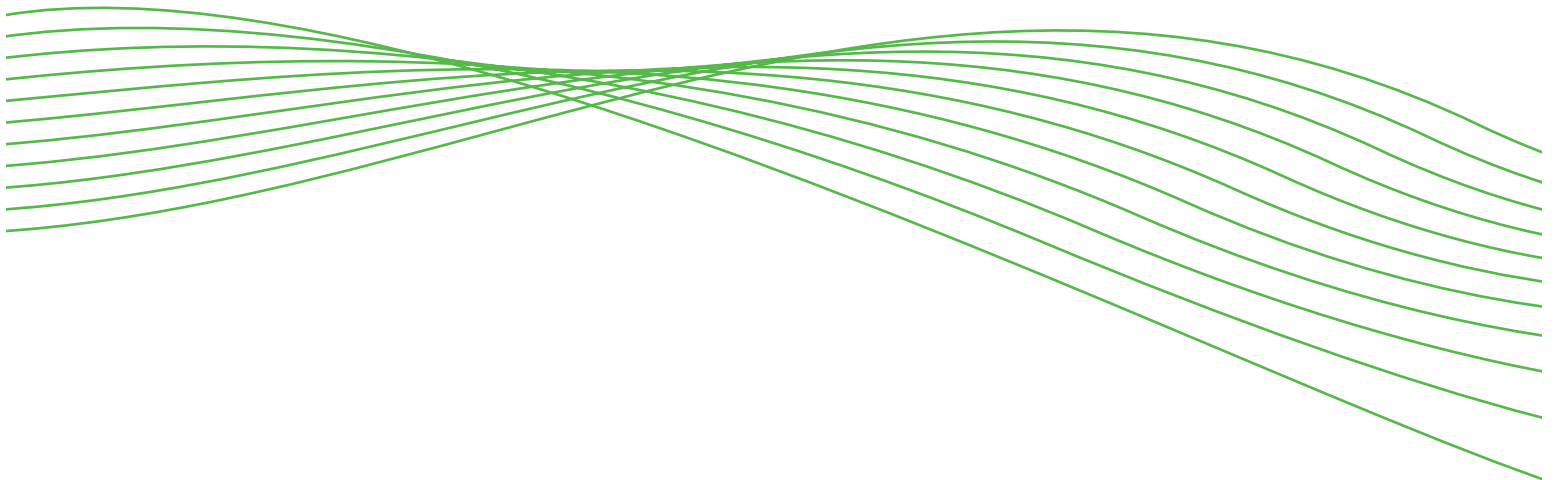
The ProCurve Secure Router 7000dl series provides an affordable and scalable platform for SMB as well as medium and large enterprises to connect branch offices to their headquarter locations. The Secure Router 7000dl series offers a variety of WAN interface modules and supports wire-speed routing performance with integrated security and convergence capabilities to secure branch office connections edge to edge while simplifying the deployment, management, and support of routers.



ProCurve Secure Router
7102dl (J8752A)



ProCurve Secure Router
7203dl (J8753A)



ProCurve Secure Router 7000dl Series

Features and benefits

Security

- **Stateful firewall:** includes an integrated stateful firewall and a Cyber Attack Defense Engine that stops common attacks to help ensure continuous availability of critical Internet-dependent applications; the firewall also supports NAT and port-forwarding operations
- **Access control lists (ACLs):** provide IP Layer 3 filtering based on source/destination IP address/subnet and source/destination TCP/UDP port number
- **IPSec VPN:** optional IPSec VPN module enables site-to-site and client sessions; tunneling protocols include IPSec and GRE; encryption methods include 3DES-CBC, DES-CBC, AES-CBC, 128-bit, 192-bit, and 256-bit; hash algorithms supported are SHA-1, MD5, and manual IPSec policies; supports the ability to route traffic between tunnels (hub and spoke VPNs)
- **NEW HTTP content filtering:** HTTP filtering can be applied to incoming or outgoing sessions on any IP interface to provide a proactive defense against Web-based threats; also uses the WiSP protocol to communicate with Websense® Enterprise server for enhanced content filtering services
- **Policy-based routing:** allows the enforcement of packet policies and resource allocation down to individual end systems and end users
- **Network address translation (NAT) support:** provides 1:1 or 1:many NAT port translation
- **Management security:** utilizes SSHv2, secure copy, and SSL to encrypt all HTTP traffic, allowing secure access to the browser-based management GUI in the router; supports AAA systems, including authentication methods that utilize RADIUS servers or a local user database for operator and privileged mode passwords

- **Global password encryption:** provides a global command to allow encryption of all user passwords
- **RADIUS authentication:** user authentication is performed via RADIUS to prevent unauthorized management access
- **TACACS+ AAA support:** offers full authentication, authorization, and accounting (AAA) with TACACS+
- **IEEE 802.1X supplicant:** supports IEEE 802.1X supplicant mode, where the router transmits and receives EAP requests from the authenticator to support IEEE 802.1X-enabled environments and prevent rogue networking equipment deployments

Ease of use

- **ProCurve AutoSynch™ capability:** automatic synchronization of the internal flash and compact flash memory to help ensure that the most recent configuration and image files are stored in both locations to facilitate remote deployment, manageability, and maintenance
- **ProCurve SafeMode™ capability:** allows easy recovery of configuration mishaps when modifying active configurations remotely
- **Industry-standard CLI:** utilizes a familiar command-line interface (CLI) to minimize training and certification costs
- **Link Layer Discovery Protocol (LLDP):** supported by ProCurve Manager to enable real-time mapping of Ethernet nodes connected to the router ports

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- **Compact flash port:** facilitates remote site installation by allowing the system image and configuration file to boot from externally accessible compact flash (CF) drive; can be configured to support ProCurve AutoSynch technology to simultaneously update external CF and onboard flash with the system image and configuration file, helping to limit downtime and switchover in the event of failure
- **Dual flash images:** provide independent primary and secondary OS files for backup while upgrading
- **Firewall and VPN wizards:** the GUI provides a simplified format for configuring firewall policies and access control lists (ACLs), as well as setting up VPN tunnels; novice and expert users will find the GUI to be intuitive and easy to use
- **Central management:** supports SNMPv2/v3; can be centrally managed to archive and update configuration and software image files, and secures SNMP management through addition of authentication and encryption

Convergence

- **VoIP support:** supports H.323 and SIP ALGs through a firewall

Quality of Service (QoS)

- **Layer 2/3/4 QoS mechanisms:** Precedence and DiffServ priority tagging based on IP address, IP Type of Service (ToS), L3 protocol, TCP/UDP port number, and source port
- **Scheduling mechanisms:** supports Weighted Fair Queuing (WFQ), FIFO, Low Latency Queuing (LLQ), and Priority Queuing (PQ)
- **Class-Based Weighted Fair Queuing (CBWFQ):** allows allocation of bandwidth to a particular class of traffic based on a percentage of total available bandwidth or maximum Kbps throughput

- **Traffic shaping and QoS support for Ethernet ports:** allow the ability to apply WFQ, LLQ, and CBWFQ mechanisms to Ethernet ports based on DiffServ Code Point settings
- **Policy and shaping:** support Frame Relay Traffic Shaping (FRTS) and frame relay fragmentation (FRF.12) to help minimize insertion delay across low-speed WAN links

Resiliency and high availability

- **Equal-cost multi-path (ECMP) for BGP, OSPF, and static routes:** provides the ability to load-balance traffic across multiple WAN connections
- **Multilink capability:** MLFR and MLPPP enable multiple T1/E1 ports to be aggregated and dynamically load-balanced across Frame Relay or PPP links
- **Multi-homing BGP support:** supports redundant WAN connections to multiple service providers using BGP routing protocol

NEW Network monitor: provides performance testing and Layer 3 network-connectivity monitoring for integrated IP interfaces and externally connected ADSL/cable modems; can be used to initiate a demand routing backup connection based on the status of IP links

- **Optional redundant power supply:** provides uninterrupted power (provided by ProCurve 600 RPS/EPS)

Layer 2 switching

- **VLAN support and tagging:** support complete IEEE 802.1Q (4,096 VLAN IDs)

Layer 3 routing

- **IP routing protocols:** supports static routes, RIP, RIPv2, OSPF, and BGP4
- **Policy-based routing:** allows users to route based upon both source and destination address

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Layer 3 services

- **IP multicast:** supports PIM SM, IGMPv2, and multicast stub routing
- **PIM Sparse mode:** routes IP multicast traffic using PIM Sparse mode (PIM-SM)
- **DHCP support:** acts as a DHCP server, relay, or client

NEW SNTP Client/Server

- SNTP client: obtains time settings from NTP server using SNTP
- SNTP server: device will respond to SNTP client requests for time settings

Supported WAN standards

- **WAN protocols:** provides support for PPP, Frame Relay, IPSec, HDLC, DDR, MLPPP, MLFR, PPPoA, and PPPoE
- **Dial-on-Demand Routing (DDR):** ISDN or analog modem links activate when interesting traffic needs to be routed, helping to avoid costs associated with toll charges
- **Modular router (7102dl only):** includes two slots to accommodate dl interface cards; supports from 1 to 4 T1/E1 lines
- **High performance (7102dl only):** provides support for PPP, Frame Relay, IPSec, HDLC, DDR, MLPPP, MLFR, PPPoA, and PPPoE
 - Supports wire-speed routing of up to 4 T1/E1 lines
 - Product ships with maximum 32 MB flash and 128 MB RAM to eliminate costly upgrades when enabling new services

Industry-leading warranty

- **Lifetime warranty:** for as long as you own the product, with next-business-day advance replacement (available in most countries)

Services

ProCurve Secure Router 7102dl

- 3-year, 4-hour onsite, 13x5 coverage for hardware (UA432E)
- 3-year, 4-hour onsite, 24x7 coverage for hardware (UA433E)
- 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UA434E)

ProCurve Secure Router 7203dl

- 3-year, 4-hour onsite, 13x5 coverage for hardware (UA435E)
- 3-year, 4-hour onsite, 24x7 coverage for hardware (UA436E)
- 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UA437E)

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Specifications



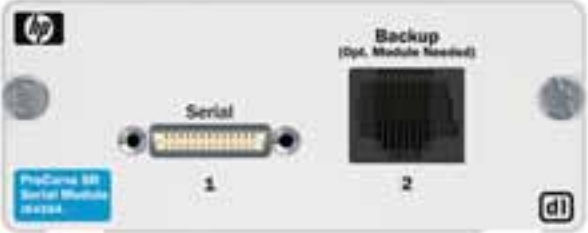

ProCurve Secure Router 7102dl (J8752A)

ProCurve Secure Router 7203dl (J8753A)

Ports	2 10/100 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX) 2 dl module slots 1 Compact Flash port 500 max VPN sessions 1 RS-232C DB-9 console port RPS option N/A VPN encryption module slot Yes	2 10/100 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX) 2 dl module slots 1 dl wide module slot 1 Compact Flash port 1000 max VPN sessions 1 RS-232C DB-9 console port Yes Yes
Physical characteristics	Dimensions (D x W x H) 11.52 x 17.42 x 1.73 in. (29.26 x 44.25 x 4.39 cm) (1U height) Weight 10.26 lb. (4.62 kg)	Dimensions (D x W x H) 11.52 x 17.42 x 1.73 in. (29.26 x 44.25 x 4.39 cm) (1U height) Weight 10.95 lb. (4.93 kg)
Memory and processor	Flash capacity 32 MB SDRAM 128 MB	Flash capacity 32 MB SDRAM 256 MB
Mounting	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included); horizontal surface mounting only	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included); horizontal surface mounting only
Performance	WAN throughput 150 kpps; up to 4xT1/E1 lines	WAN throughput 210 kpps; up to 8xT1/E1 lines
Environment	Operating temperature 32°F to 122°F (0°C to 50°C) Operating relative humidity 0% to 95%, non-condensing Non-operating/Storage temperature -4°F to 158°F (-20°C to 70°C) Non-operating/Storage relative humidity 0% to 95%, non-condensing	Operating temperature 32°F to 122°F (0°C to 50°C) Operating relative humidity 0% to 95%, non-condensing Non-operating/Storage temperature -4°F to 158°F (-20°C to 70°C) Non-operating/Storage relative humidity 0% to 95%, non-condensing
Electrical characteristics	Voltage 100–127 VAC/200–240 VAC Current 0.4 A/0.2 A Power consumption 15 W Frequency 50/60 Hz	Voltage 100–127 VAC/200–240 VAC Current 0.4 A/0.2 A Power consumption 50 W Frequency 50/60 Hz
Safety	CSA 22.2 No. 60950 3rd edition; CE Labeled; cUL Certified; EN 60950/IEC 60950, 3rd edition; UL 60950; UL Listed; AS/NZS60950; KN60950; GOST R MEK60950; TS60950	CSA 22.2 No. 60950 3rd edition; CE Labeled; cUL Certified; EN 60950/IEC 60950, 3rd edition; UL 60950; UL Listed; AS/NZS60950; KN60950; GOST R MEK60950; TS60950
Emissions	FCC Rules Part 15, Subpart B Class A; CISPR22/A2:2002; EN 55022/A2:2002; ICES-003; VCCI V-3/2000.04; IEC/EN61000-3-2; IEC/EN61000-3-3; EN 55024/A1:2001; IEC61000-4-2, 4-3, 4-4, 4-5, 4-6, 4-8, 4-11; BSMI CNS 13438	FCC Rules Part 15, Subpart B Class A; CISPR22/A2:2002; EN 55022/A2:2002; ICES-003; VCCI V-3/2000.04; IEC/EN61000-3-2; IEC/EN61000-3-3; EN 55024/A1:2001; IEC61000-4-2, 4-3, 4-4, 4-5, 4-6, 4-8, 4-11; BSMI CNS 13438
Telecom	TBR-1; TBR-2; TBR-3; TBR-12; TBR-13; TBR-21; ITU-T G.992.1	TBR-1; TBR-2; TBR-3; TBR-12; TBR-13; TBR-21; ITU-T G.992.1

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Accessories

<p>ProCurve VPN Client Unlimited User License (J8750A) Unlimited-user license for IPSec VPN client software</p>	<p>System requirements Minimum memory: 32 MB RAM Recommended memory: 64 MB RAM Minimum disk space: 10 MB</p>	<p>Operating system Microsoft® Windows NT® , Windows® 2000, Windows XP, Windows 95, Windows 98</p>
<p>ProCurve VPN Client 100 User License (J8758A) 100-user license for IPSec VPN client software</p>	<p>System requirements Minimum memory: 32 MB RAM Recommended memory: 64 MB RAM Minimum disk space: 10 MB</p>	<p>Operating system Microsoft Windows NT, Windows 2000, Windows XP, Windows 95, Windows 98</p>
<p>dl Modules</p>		
<p>ProCurve Secure Router dl 2-Port ISDN BRI S/T Module (J8457A) 2-port ISDN BRI S/T module; includes 2 RJ45-RJ45 straight-through cables (3 m)</p>	<p>Connectivity Connectors: RJ-45 Interface: 2 ISDN BRI S/T interfaces, each supporting 2 B channels (128 kbps)</p> <p>Physical characteristics Dimensions (D x W x H): 4.4375 x 3.20 x 1.29 in. (11.27 x 8.13 x 3.28 cm) Weight: 0.21 lb. (0.1 kg)</p>	<p>Environment Operating temperature: 32°F to 122°F (0°C to 50°C) Operating relative humidity: 0% to 95%, non-condensing Non-operating/Storage temperature: -40°F to 185°F (-40°C to 85°C) Non-operating/Storage relative humidity: 0% to 95%, non-condensing</p>
<p>ProCurve Secure Router dl 2-Port ISDN BRI U Module (J9010A) 2-port ISDN BRI U module; includes 2 RJ11-RJ45 straight-through cables (3 m)</p>	<p>Connectivity Connectors: RJ-45 Interface: 2 ISDN BRI U interfaces, each supporting 2 B channels (128 kbps)</p> <p>Physical characteristics Dimensions (D x W x H): 4.4375 x 3.20 x 1.29 in. (11.27 x 8.13 x 3.28 cm) Weight: 0.21 lb. (0.1 kg)</p>	<p>Environment Operating temperature: 32°F to 122°F (0°C to 50°C) Operating relative humidity: 0% to 95%, non-condensing Non-operating/Storage temperature: -40°F to 185°F (-40°C to 85°C) Non-operating/Storage relative humidity: 0% to 95%, non-condensing</p>
<p>ProCurve Secure Router dl 1-port Serial Module (J8458A) 1-port serial dl module supporting up to 10 Mbps over V.35/X.21 interfaces to an external CSU/DSU. Requires a V.35 or X.21 serial cable to connect to an external CSU/DSU. Serial interface operates in DTE mode only.</p> 	<p>Connectivity Connectors: (Serial) 26-pin interface, 1 RJ-45 for optional backup module Rate: Up to 10 Mbps to an external CSU/DSU Interface: V.35 or X.21 interface support</p> <p>Physical characteristics Dimensions (D x W x H): 4.65 x 3.2 x 1.3 in. (11.81 x 8.13 x 3.3 cm) Weight: 0.11 lb. (0.05 kg)</p>	<p>Environment Operating temperature: 32° to 122°F (0° to 50°C) Operating relative humidity: 0% to 95%, non-condensing Non-operating/Storage temperature: -40° to 185°F (-40° to 85°C) Non-operating/Storage relative humidity: 0% to 95%, non-condensing</p>
<p>ProCurve Secure Router dl 1-port ADSL2+ Annex A Module (J8459A) 1-port ADSL2+ Annex A dl Module supports ADSL/ADSL2/ADSL2+ over POTS lines</p> 	<p>Connectivity Connectors: (ADSL) RJ-11, 1 RJ-45 for optional backup module Supported standard: ADSL, ADSL2, ADSL2+ for Annex A over POTS lines Min/Max upstream rate: ADSL: 32 kbps to 800 kbps ADSL2: 32 kbps to 800 kbps ADSL2+: 32 kbps to 2 Mbps Min/Max downstream rate: ADSL: 224 kbps to 8 Mbps ADSL2: 224 kbps to 12 Mbps ADSL2+: 224 kbps to 24.5 Mbps Line code: DMT</p> <p>Physical characteristics Dimensions (D x W x H): 4.65 x 3.2 x 1.3 in. (11.81 x 8.13 x 3.3 cm) Weight: 0.18 lb. (0.08 kg)</p>	<p>Environment Operating temperature: 32° to 122°F (0° to 50°C) Operating relative humidity: 0% to 95%, non-condensing Non-operating/Storage temperature: -40° to 185°F (-40° to 85°C) Non-operating/Storage relative humidity: 0% to 95%, non-condensing</p> <p>Notes ADSL2+ capability not available at first release, but will be upgradable via a future software release.</p>

ProCurve Secure Router 7000dl Series

Accessories

dl Modules *continued*

ProCurve Secure Router dl 1-port ADSL2+ Annex B Module (J8759A)

1-port ADSL2+ Annex B dl Module supports ADSL/ADSL2/ADSL2+ over ISDN lines



Connectivity

Connectors: (ADSL) RJ-11, 1 RJ-45 for optional backup module
Supported standard: ADSL, ADSL2, ADSL2+ for Annex B over ISDN lines
Min/Max upstream rate:
ADSL: 32 kbps to 800 kbps
ADSL2: 32 kbps to 800 kbps
ADSL2+: 32 kbps to 2 Mbps
Min/Max downstream rate:
ADSL: 224 kbps to 8 Mbps
ADSL2: 224 kbps to 12 Mbps
ADSL2+: 224 kbps to 24.5 Mbps
Line code: DMT

Environment

Operating temperature: 32° to 122°F (0° to 50°C)
Operating relative humidity: 0% to 95%, non-condensing
Non-operating/Storage temperature: -40° to 185°F (-40° to 85°C)
Non-operating/Storage relative humidity: 0% to 95%, non-condensing

Notes

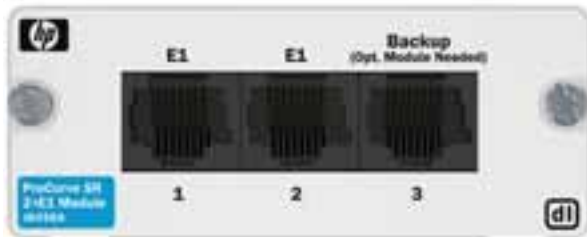
ADSL2/ADSL2+ capability not available at first release, but will be upgraded via a future software release.

Physical characteristics

Dimensions (D x W x H): 4.65 x 3.2 x 1.3 in. (11.81 x 8.13 x 3.3 cm)
Weight: 0.18 lb. (0.08 kg)

ProCurve Secure Router dl 2xE1 Module (J8456A)

2-port E1/FrE1 dl module with integrated CSU/DSU. Includes 2 RJ48-RJ48 Telco straight-through cables (5 m).



Connectivity

Connectors: (2xE1) RJ-48C, 1 RJ-45 for optional backup module
E1: 2.048 Mbps (30x64 kbps) for each E1 interface
FrE1: Mbps DSO channelized (Nx56/64 kbps)
Line code: HDB3, AMI
Framing: FAS with optional CRC-4
Receiver sensitivity: -30 dB

Environment

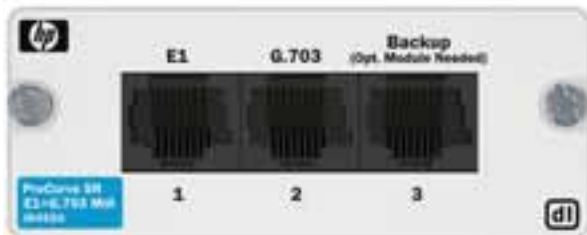
Operating temperature: 32° to 122°F (0° to 50°C)
Operating relative humidity: 0% to 95%, non-condensing
Non-operating/Storage temperature: -40° to 185°F (-40° to 85°C)
Non-operating/Storage relative humidity: 0% to 95%, non-condensing

Physical characteristics

Dimensions (D x W x H): 4.65 x 3.2 x 1.3 in. (11.81 x 8.13 x 3.3 cm)
Weight: 0.13 lb. (0.06 kg)

ProCurve Secure Router dl 1xE1+G.703 Module (J8455A)

1-port E1/FrE1 dl module with integrated CSU/DSU and G.703 TDM interface to connect to a PBX for voice service. Includes 2 RJ48-RJ48 Telco straight-through cables (5 m).



Connectivity

Connectors: (E1) RJ-48C, (G.703) RJ-48C, 1 RJ-45 for optional backup module
E1: 2.048 Mbps (30x64 kbps)
FrE1: Mbps DSO channelized (Nx56/64 kbps)
Line code: HDB3, AMI
Framing: FAS with optional CRC-4
Receiver sensitivity: -30 dB

Environment

Operating temperature: 32° to 122°F (0° to 50°C)
Operating relative humidity: 0% to 95%, non-condensing
Non-operating/Storage temperature: -40° to 185°F (-40° to 85°C)
Non-operating/Storage relative humidity: 0% to 95%, non-condensing

Physical characteristics

Dimensions (D x W x H): 4.65 x 3.2 x 1.3 in. (11.81 x 8.13 x 3.3 cm)
Weight: 0.16 lb. (0.07 kg)

ProCurve Secure Router 7000dl Series

Accessories

dl Modules *continued*

ProCurve Secure Router dl 1xE1 Module (J8454A)

1-port E1/FrE1 dl module with integrated CSU/DSU. Includes 1 RJ48-RJ48 Telco straight-through cable (5 m).



Connectivity

Connectors: (E1) RJ-48C, 1 RJ-45 for optional backup module
E1: 2.048 Mbps (Nx64 kbps)
FrE1: Mbps DS0 channelized (Nx56/64 kbps)
Line code: HDB3, AMI
Framing: FAS with optional CRC-4
Receiver sensitivity: -30 dB

Physical characteristics

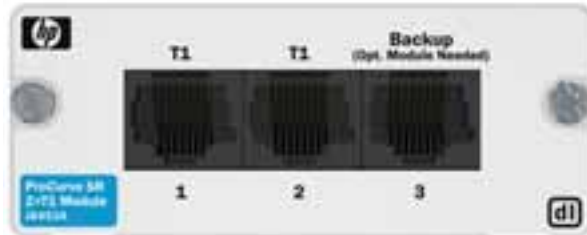
Dimensions (D x W x H):
4.65 x 3.2 x 1.3 in.
(11.81 x 8.13 x 3.3 cm)
Weight: 0.13 lb. (0.06 kg)

Environment

Operating temperature:
32° to 122°F (0° to 50°C)
Operating relative humidity:
0% to 95%, non-condensing
Non-operating/Storage temperature:
-40° to 185°F
(-40° to 85°C)
Non-operating/Storage
relative humidity: 0% to 95%,
non-condensing

ProCurve Secure Router dl 2xT1 Module (J8453A)

2-port T1/FrT1 dl module with integrated CSU/DSU. Includes 2 RJ48-RJ48 Telco straight-through cables (5 m).



Connectivity

Connectors: (2xT1) RJ-48C,
1 RJ-45 for optional backup
module
T1: 1.544 Mbps (24x64 kbps) for
each T1 interface
FrT1: Mbps DS0 channelized (Nx64
kbps)
Line code: AMI, B8ZS
Input signal: 0 to -36 (DS1)
Line build out: 0, -7.5, -15,
-22.5 dB

Physical characteristics

Dimensions (D x W x H):
4.65 x 3.2 x 1.3 in.
(11.81 x 8.13 x 3.3 cm)
Weight: 0.13 lb. (0.06 kg)

Environment

Operating temperature:
32° to 122°F (0° to 50°C)
Operating relative humidity:
0% to 95%, non-condensing
Non-operating/Storage temperature:
-40° to 185°F
(-40° to 85°C)
Non-operating/Storage
relative humidity: 0% to 95%,
non-condensing

ProCurve Secure Router dl 1xT1 + DSX-1 Module (J8452A)

1-port T1 dl module with integrated CSU/DSU and DSX-1 TDM interface to connect to a PBX for voice service. Includes 2 RJ48-RJ48 Telco straight-through cables (5 m).



Connectivity

Connectors: (T1) RJ-48C, (DSX-1)
RJ-48C, 1 RJ-45 for optional
backup module
T1: 1.544 Mbps (24x64 kbps)
FrT1: Mbps DS0 (Nx64 kbps);
programmable DS0 assignment
to allow DSX-1 TDM drop off to
PBX
Line code: AMI, B8ZS
Input signal: 0 to -36 (DS1)
Line build out: 0, -7.5, -15,
-22.5 dB

Physical characteristics

Dimensions (D x W x H):
4.65 x 3.2 x 1.3 in.
(11.81 x 8.13 x 3.3 cm)
Weight: 0.13 lb. (0.06 kg)

Environment

Operating temperature:
32° to 122°F (0° to 50°C)
Operating relative humidity:
0% to 95%, non-condensing
Non-operating/Storage temperature:
-40° to 185°F
(-40° to 85°C)
Non-operating/Storage
relative humidity: 0% to 95%,
non-condensing

ProCurve Secure Router 7000dl Series

Accessories

dl Modules *continued*

ProCurve Secure Router dl 1xT1 Module (J8451A)

1-port T1/FrT1 dl module with integrated CSU/DSU. Includes 1 RJ48-RJ48 Telco straight-through cable (5 m).



Connectivity

Connectors: (T1) RJ-48C, 1 RJ-45 for optional backup module
 T1: 1.544 Mbps (24x64 kbps) for each T1 interface
 FrT1: Mbps DS0 channelized (Nx64 kbps)
 Line code: AMI, B8ZS
 Input signal: 0 to -36 (DS1)
 Line build out: 0, -7.5, -15, -22.5 dB

Physical characteristics

Dimensions (D x W x H):
 4.65 x 3.2 x 1.3 in.
 (11.81 x 8.13 x 3.3 cm)
 Weight: 0.13 lb. (0.06 kg)

Environment

Operating temperature:
 32° to 122°F (0° to 50°C)
 Operating relative humidity:
 0% to 95%, non-condensing
 Non-operating/Storage temperature:
 -40° to 185°F
 (-40° to 85°C)
 Non-operating/Storage
 relative humidity: 0% to 95%,
 non-condensing

dl Wide Modules

ProCurve Secure Router dl Wide 8xSerial Module (J9011A)

8-port serial dl wide module supporting up to 2 Mbps per port over V.35/X.21 interfaces to an external CSU/DSU

Connectivity

Connectors: (Serial) 26-pin interface
 Rate: Up to 10 Mbps per port to an external CSU/DSU
 Interface: V.35 or X.21 interface support

Physical characteristics

Dimensions (D x W x H):
 8.75 x 6.0 x 1.0 in.
 (22.23 x 15.24 x 2.54 cm)
 Weight: 0.54 lb. (0.24 kg)

Environment

Operating temperature:
 32°F to 122°F (0°C to 50°C)
 Operating relative humidity: 0% to 95%, non-condensing
 Non-operating/Storage temperature:
 -40°F to 185°F (-40°C to 85°C)
 Non-operating/Storage
 relative humidity: 0% to 95%,
 non-condensing

Notes

Requires the number of V.35 or X.21 serial cables needed to connect and use at the customer premises with an external CSU/DSU. Serial interfaces operate in DTE mode only. There is no internal clock.

ProCurve Secure Router dl Wide 8xT1/E1 Module (J8463A)

8-port T1/FrT1/E1/FrE1 dl wide module can support either T1 or E1 functionality via onboard dipswitch setting. Includes 8 RJ48-RJ48 Telco straight-through cables (5 m).



Connectivity

Connectors: (8xT1/E1) RJ-48C
 T1: 1.544 Mbps (24x64 kbps) for each T1
 E1: 2.048 Mbps (30x64 kbps) for each E1
 FrT1/E1: DS0 channelized (Nx64 kbps)
 T1 line code: AMI/B8ZS
 E1 line code: HDB3

Physical characteristics

Dimensions (D x W x H):
 6.0 x 8.64 x 0.94 in.
 (15.24 x 21.95 x 2.39 cm)
 Weight: 2.93 lb. (1.32 kg)

Environment

Operating temperature:
 32° to 122°F (0° to 50°C)
 Operating relative humidity:
 0% to 95%, non-condensing
 Non-operating/Storage temperature:
 -40° to 185°F
 (-40° to 85°C)
 Non-operating/Storage
 relative humidity: 0% to 95%,
 non-condensing

Cables

ProCurve Secure Router Serial Cable X.21 DTE (J8755A)

X.21 DTE serial cable to be used with ProCurve Secure Router Serial dl module to connect to external CSU/DSU

Connectivity

Connectors: 26-pin interface to dl serial module, X.21 DTE interface to external CSU/DSU

Length: 2-meter cable

ProCurve Secure Router Serial Cable V.35 DTE (J8757A)

V.35 DTE serial cable to be used with ProCurve Secure Router Serial dl module to connect to external CSU/DSU

Connectivity

Connectors: 26-pin interface to dl serial module, V.35 DTE interface to external CSU/DSU

Length: 2-meter cable

ProCurve Secure Router 7000dl Series

Accessories

dl Backup Modules

ProCurve Secure Router dl 1-port ISDN BRI U Backup Module (J8460A)

1-port ISDN BRI U module attaches as a daughter card to dl modules to provide backup capability. Includes 1 RJ11-RJ45 straight-through cable (3 m).

Connectivity

Connectors: RJ-45
Interface: U interface support; support for 1B channel (64 kbps)

Physical characteristics

Dimensions (D x W x H):
3.75 x 2.5 x 0.73 in.
(9.53 x 6.35 x 1.85 cm)
Weight: 0.4 lb. (0.18 kg)

Environment

Operating temperature: 32° to 122°F (0° to 50°C)
Operating relative humidity: 0% to 95%, non-condensing
Non-operating/Storage temperature: -40° to 185°F (-40° to 85°C)
Non-operating/Storage relative humidity: 0% to 95%, non-condensing

ProCurve Secure Router dl 1-port ISDN BRI S/T Backup Module (J8461A)

1-port ISDN BRI S/T module attaches as a daughter card to dl modules to provide backup capability. Includes 1 RJ11-RJ45 straight-through cable (3 m).

Connectivity

Connectors: RJ-45
Interface: S/T interface support; support for 1B channel (64 kbps)

Physical characteristics

Dimensions (D x W x H):
3.75 x 2.5 x 0.73 in.
(9.53 x 6.35 x 1.85 cm)
Weight: 0.4 lb. (0.18 kg)

Environment

Operating temperature: 32° to 122°F (0° to 50°C)
Operating relative humidity: 0% to 95%, non-condensing
Non-operating/Storage temperature: -40° to 185°F (-40° to 85°C)
Non-operating/Storage relative humidity: 0% to 95%, non-condensing

ProCurve Secure Router dl Analog Modem Backup Module (J8462A)

1-port v.90 analog modem module attaches as a daughter card to dl modules to provide backup capability. Users can also initiate an out-of-band console session through the modem interface.

Supports speeds from 300 bps to 33.6 kbps.

Physical characteristics

Dimensions (D x W x H):
3.75 x 2.5 x 0.73 in.
(9.53 x 6.35 x 1.85 cm)
Weight: 0.36 lb. (0.16 kg)

Environment

Operating temperature: 32° to 122°F (0° to 50°C)
Operating relative humidity: 0% to 95%, non-condensing
Non-operating/Storage temperature: -40° to 185°F (-40° to 85°C)
Non-operating/Storage relative humidity: 0% to 95%, non-condensing

VPN Encryption Modules

ProCurve Secure Router 7100/7200 IPSec VPN Base Module (J9026A)

ProCurve Secure Router 7100/7200 IPSec VPN Base encryption module for 7100dl and 7200dl series routers enables IPSec capabilities in software and allows the termination of up to 10 VPN tunnels.

Physical characteristics

Dimensions (D x W x H):
3.12 x 3.1 x 1.26 in.
(7.92 x 7.87 x 3.2 cm)
Weight: 0.27 lb. (0.12 kg)

Environment

Operating temperature: 32°F to 122°F (0°C to 50°C)
Operating relative humidity: 0% to 95%, non-condensing
Non-operating/Storage temperature: -40°F to 185°F (-40°C to 85°C)
Non-operating/Storage relative humidity: 0% to 95%, non-condensing

Notes

Includes a free 10-user ProCurve VPN client license by registering on www.my.procurve.com

ProCurve Secure Router 7100/7200 IPSec VPN Module (J8471A)

IPSec VPN encryption module for 7100dl/7200dl series routers enables VPN capability

Terminates IPSec VPN site-to-site and client sessions
Encryption: DES, 3DES, AES

Physical characteristics

Dimensions (D x W x H):
3.12 x 3.1 x 1.26 in.
(7.92 x 7.87 x 3.2 cm)
Weight: 0.27 lb. (0.12 kg)

Environment

Operating temperature: 32° to 122°F (0° to 50°C)
Operating relative humidity: 0% to 95%, non-condensing
Non-operating/Storage temperature: -40° to 185°F (-40° to 85°C)
Non-operating/Storage relative humidity: 0% to 95%, non-condensing

ProCurve Secure Router 7000dl Series

Additional accessories

**ProCurve 600 Redundant External Power Supply
(J8168A)**

For more information

To learn more about ProCurve
Networking, please visit
www.procurve.com

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