Variable Rate VDSL Modems
Model 1068 Series Standalone & Rack Cards

Go faster with more control with Patton's Model 1068. Provide high speed end-to-end connectivity for voice and user-selectable asymmetric or symmetric data over a single, voice-grade, twisted-pair line.

Ethernet Extension
Extends Ethernet distances over 1 mile (1.6 km) using 2-wire 24 AWG unconditioned lines

Switch Selectable
Asymmetrical or symmetrical line rates up to 16.67 Mbps!

Auto-sensing Full-Duplex Ethernet
Auto-sensing 10Base-T or 100Base-TX; supports full or half-duplex Ethernet

Transparent LAN bridging
Passes higher layer protocols and supports 802.1Q VLAN tagging

Automatic Learning, Aging, and Filtering
Only allows packets with addresses outside the LAN to be forwarded

Full-Service Integration
Supports voice, data, and high quality, real-time, bi-directional streaming video

Patton's Model 1068 VDSL Modems provide up to 16 Mbps of high speed Ethernet and voice services between LANs or other network-enabled devices over a single twisted-pair. The Model 1068 is the only variable-rate asymmetrical/symmetrical standalone VDSL modem solution available today. The ability to select various asymmetrical and symmetrical line rates enables the Model 1068 to satisfy a broad range of applications. The Model 1068DV's line sharing capabilities allow users to download files from the Internet, surf the WWW, and answer e-mail messages while talking on the phone or faxing documents.

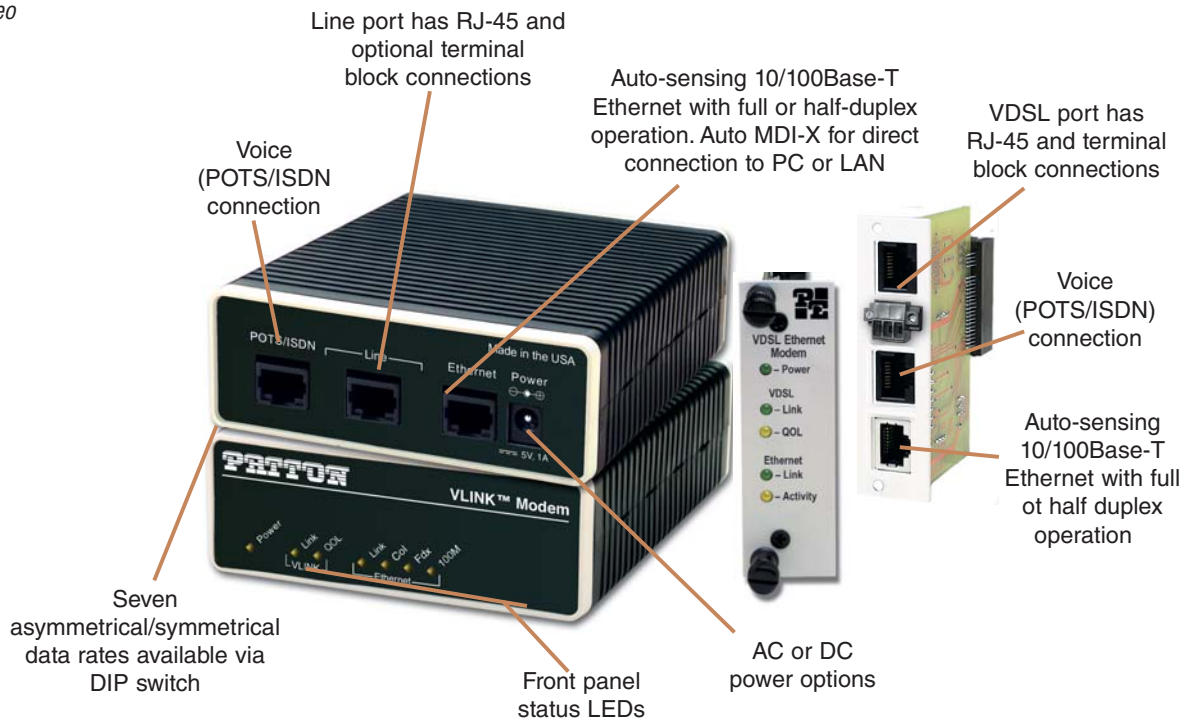The Patton Model 1068 is easy to configure and install. When configuration of the Model 1068 is necessary, an easily accessible DIP switch is located on the bottom side of the unit. Once configured, simply plug the Ethernet device into the Ethernet port, the voice device into the POTS/ISDN port, and connect power.

The Model 1068 is an effective solution for providing both data and voice services over an existing copper infrastructure and eliminating the expense of fiber cables. If you want to take your network and voice connections farther and faster, Patton's VDSL modems are for you! Just plug, power, and play!
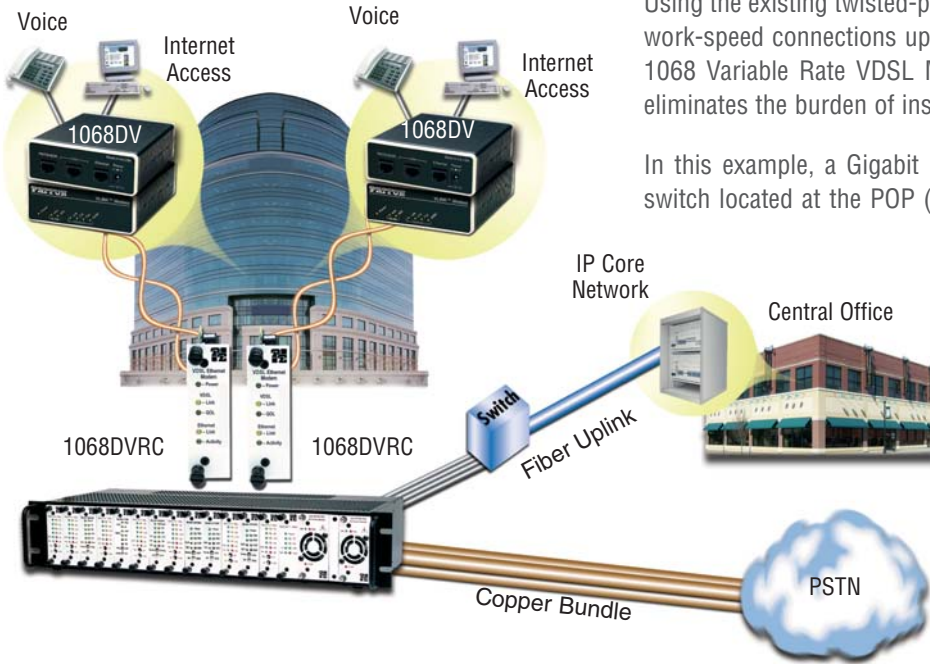
For more information, visit us at
www.patton.com.

GET YOUR ADVANCE SHIP 5 YEARS ENHANCED WARRANTY
Special Rates Available Call for Details

Line port has RJ-45 and optional terminal block connections

Auto-sensing 10/100Base-T Ethernet with full or half-duplex operation. Auto MDI-X for direct connection to PC or LAN

VDSL port has RJ-45 and terminal block connections

Voice (POTS/ISDN connection

Voice (POTS/ISDN) connection

Auto-sensing 10/100Base-T Ethernet with full ot half duplex operation

Seven asymmetrical/symmetrical data rates available via DIP switch

Front panel status LEDs

AC or DC power options

Using the existing twisted-pair voice-grade copper infrastructure to deliver network-speed connections up to 16 Mbps is now possible using Patton's Model 1068 Variable Rate VDSL Modems. Using the existing copper infrastructure eliminates the burden of installing and absorbing CAT-5 and fiber costs.

In this example, a Gigabit Ethernet fiber uplink is delivered into an Ethernet switch located at the POP (Point of Presence). Ethernet switches transfer the data from the Gigabit fiber uplink to the Patton 1001 rack systems equipped with the 1068/CO (Central Office) Variable Rate Rack Card Modems. Using VDSL, the rack cards transmit the data across the copper infrastructure to remote Model 1068/CP (Customer Premise) units at various locations in a building. The 1068/CP modems convert the VDSL signals back to Ethernet so they can be delivered to remote users.

Network and POTS/ISDN services are delivered over the same twisted-pair copper wiring with built-in POTS splitters.

Asymmetrical Line Rates		
Line Rates		Distance in ft (m)
Upstream (Mbps)	Downstream (Mbps)	
1.56	4.17	6,000 (1,829)
1.56	9.38	5,500 (1,676)
2.34	16.67	5,000 (1,524)

Symmetrical Line Rates		
Line Rates		Distance in ft (m)
Upstream (Mbps)	Downstream (Mbps)	
6.25	6.25	4,500 (1,372)
9.38	9.38	4,150 (1,265)
12.50	12.50	4,000 (1,220)
16.67	16.67	3,300 (1,006)

Specifications*

VDSL line interface
RJ-45 (pin 4 = ring; pin 5 = tip) optional two-position removable terminal block (supports 19–26 AWG or 0.9–0.4 mm wire)

Ethernet interface
8-position shielded RJ-45. Auto-sensing 10/100Base-T with half or full-duplex operation. DIP switch capable of disabling 100 Mbps full-duplex for equipment that does not support 802.3X (Pause Packets)

POTS/ISDN interface
RJ-45 (pin 4 = ring; pin 5 = tip)

Protocol
Transparent to high layer protocol. Supports 802.1Q VLAN tagging

Modulation
QAM (Quadrature Amplitude Modulation)

Duplexing Method
FDD (Frequency Division Duplexing)

Frequency Range
VDSL: 1–8 Mhz; POTS/ISDN: DC–120 kH

Transmission
VDSL line rate: Up to 16.67 Mbps; Data rate: Up to 15 Mbps full-duplex

Surge Suppression
VDSL line maximum current surge: 20kA (8/20µs) gas tube

Front Panel Indicators
Power, VLINK Link and QOL (quality of link), Ethernet Link, Col, Fdx, and 100M

Power Supply
External AC and DC options: 120VAC, and universal input (UI)—100–240 VAC, or optional DC -48 VDC, -24 VDC, and -12 VDC

Compliance
FCC Part 15A and Part 68A & B (1068DV version only), CE Mark, EMC Directive 89/336/EEC, Low-Voltage Directive 73/23/EEC

Environment
Temperature: 32–122°F (0–50°C)
Humidity: Up to 90% non-condensing

Dimensions
Standalone
1.5H x 4.13W x 3.75D in.
(3.81H x 10.5W x 9.53D cm);
Rack Card
3.0H x 0.83W x 7.84D in

* Specifications subject to change without notice.