#### PATTON ELECTRONICS COMPANY

## PRODUCT QUICK REFERENCE



Product Model 1058 Standalone and Rack Card

Product Name VDSL Modem

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#### Who are the customers for the Model 1058?

The Patton Model 1058DV enables the utilization of existing copper infrastructure for the delivery of symmetrical broadband and POTS/ISDN services over a single twisted pair of voice-grade wire. The Model 1058DV solution is targeted to any user or provider who needs high-speed data links. These organizations include but are not limited to CLEC's, ISP's, Educational Facilities (Campus), MTU/MDU's, and corporate/government offices. Popular applications for symmetrical VDSL include medical imaging, always on high-speed Internet access, and real time bi-directional video streaming.





Model 1058DV and 1058DVRC

Typical applications include:

<u>LAN-to-LAN Bridging</u>: The Model 1058 connects remote LANs over a high-speed, symmetrical 12.5Mbps line. The 1058 CP is placed at a remote location and a 1058 CO is placed at the central site to provide a LAN-to-LAN connection over a voice-grade wire.

**Ethernet Extension:** Enables the customer to overcome the 328 ft (100m) limitations of Ethernet with a symmetrical 12.5 Mbps link at distances up to 4,656 ft (1.42 km).

<u>Dedicated Internet and Voice Services:</u> VDSL enables ISP's to deliver dedicated high-speed Internet access and voice services from a Point-of-Presence (POP) to a customer premise. A 1058CO is used at the POP and a 1058CP is used at the customer premise. The Model 1058DV's built-in POTS/ISDN splitter allows users to simultaneously use the phone or fax machine, while surfing the web, downloading files or receiving e-mails.

MTU/MDU Services: Using broadband VDSL, data and voice services can be extended to the hotel guest, apartment resident, and housing resident, etc. Patton's VDSL modems allow service providers to avoid the cost and trouble of wiring the individual hotel rooms with 4-wire twisted pair or Ethernet cabling by using the existing voice-grade 2-wire infrastructure. The service provider would place the 1001R rack system with multiple 1058RCDV/CO rack cards in the basement or closet and the standalone 1058DV/CP in the individual hotel rooms. Once connected, the Model 1058's will automatically establish a high-speed Point-to-Point voice and data link.



#### **Related Patton xDSL Products:**

Patton provides a complete line of xDSL products. Whether it's VDSL for ultra-high speed connections, mSDSL for high-speed long distance connections, or iDSL for standard U-interface connections over long distances, Patton has the solutions to fit all types of networks. Patton's xDSL solutions include compact cross connects, rack-card based solutions, and CPE units for your last mile networking needs. Patton's complete line of high-speed xDSL modems, include interfaces for 10Base-T Ethernet, T1/E1, G.703/G.704, voice, and serial (X.21, V.35, EIA-530, and V.24).

DSL Type	Max Data Rate	Quick Connect	Compact (Rocket)	Rack Card	Cross Connect
iDSL	128 Kbps	1092A	1082	1092ARC	3092/3192
HDSL	1.152 Mbps	1094A	1089	1094ARC	3095
mSDSL	2.034 Mbps	1095	1088	1095RC	3095
VDSL	12.5 Mbps	-	1058	1058RC	-







Model 1095 and 1095RC (Quick Connect)

Model 1088 (Rocket)

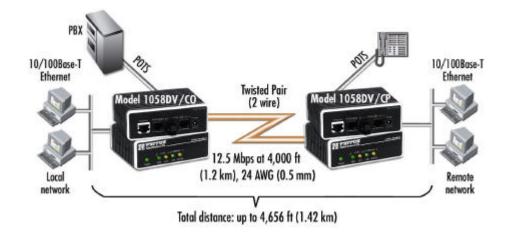
Model 3095 (Cross Connect)

Model 1058 Features and Benefits		
High-Speed Symmetrical 12.5Mbps communications link.	Fast and reliable data transmission.	
Extends Ethernet beyond its current 328 ft (100m) limitation.	Inexpensively links remote devices or extends LANs up to 4,652 ft (1,418 m).	
Built-in POTS/ISDN Splitter (1058DV only)	Provides "life-line" telephone link.	
Full service integration (voice, video, and data) services over existing voice-grade telephone wire.	Eliminates the need to install new LAN- grade cable or expensive fiber.	
Operation transparent to high-layer protocols.	Lets higher-layer broadcast, multi-cast, and data frames pass through. Supports VLAN tagged frames.	
Auto-sensing 10 or 100Base-T and full or half-duplex Ethernet.	No configuration necessary, just Plug & Play.	
Five status LEDs.	Monitoring your connection and operational status is made simple.	



#### Primary Application: Service Integration and LAN Extension

Used in pairs (Central Office and Customer Premise), the Model 1058 establishes a high-speed, line sharing, symmetrical 12.5 Mbps voice and data link. The Model 1058 interconnects two geographically separated LANs over a voice-grade twisted pair wire. Operation is simple: packets destined for the remote LAN are sent transparently, at full line rate, to the peered LAN. The Model 1058DVs built-in splitter allows users to simultaneously talk on the phone while surfing the web, downloading files or receiving e-mails.



### Optional parts for the Model 1058D and the Model 1058DV

- DC Power Supplies
- Rack cards are compatible with Patton's Model 1001R High-Density Telco Rack System.

Optional DC Power Supplies for Standalone Units		
Part Number	Description	
48V-PSM	-48 VDC power supply, 5VDC, 1A (optional)	
24V-PSM	-24 VDC power supply, 5VDC, 1A (optional)	
12V-PSM	-12 VDC power supply, 5VDC, 1A (optional)	

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#### **Shipping/Export Information**

ECCN export number: 8517.50.1000

Country of origin: United States of America, NAFTA

Total weight boxed: .96lbs (.44kg) without power supply

Individual unit: .4lbs (.18kg); without power supply

### MTBF/ Repair Information

MTBF: 126,000 Hrs. Calculation based on MIL-HDBK-217F, Notice 2 - "Parts Count Reliability

Prediction"

Mean time to repair: 7–10 days
Warranty: 1-year parts and labor

Out of warranty repair rate: \$150, flat rate – contact Patton's Tech Support for details.

### Physical Specifications

**Dimensions:** Standalone: 1.5" H x 4.13" W x 3.75" D (3.81 H x 10.5 W x 9.53 D cm)

**Rack Card:** 3.00" H x 0.83" W x 7.84" D (7.6 H x 2.1 W x 19.9 D cm)

Color: Standalone: Case: Black Front and Back Panel: Black with white letters

Rack Card: Front and Back Panel: White with black letters

Case material: Standalone: Plastic, Fire retardant

Rack Card: Iridite Aluminum

#### **Environmental**

Operating Temp: 32 to 122°F (0 to 50°C)

**Storage Temp:**  $-40 \text{ to } 185^{\circ}\text{F} \text{ (-40 to } +85^{\circ}\text{C)}$ 

Relative Humidity: Up to 90% RH, non-condensing

**Altitude:** 0 –15,000 feet (3,048 meters)

**Ventilation requirements:** None, units do not require cooling fans.



Approvals					
Safety	Emissions	Telecommunications			
CE Marked per EMC	FCC part 15, Class A	FCC Part 68 A & B (1058DV only)			
directive 89/336/EEC and low voltage directive 72/23/EEC.	EN55022 Class A, conducted and radiated emissions				
ESD EN61000-4-2	011110010110				

## **Power Supplies**

### **Standalone Units Only**

AC: 120VAC, 50-60Hz, external or Universal input, 100-240VAC, 50-60Hz, external

DC: -48VDC, -24VDC, or -12VDC external (optional)







Ordering Information- 1058D (Data Only)		
Model	Description	
1058D/CO	Central Office VDSL Modem, Data Only; RJ-45 and Terminal Block; No Power Supply	
1058D/CP	Customer Premise VDSL Modem, Data Only; RJ-45 and Terminal Block; No Power Supply	
1058D/CO/120	Central Office VDSL Modem, Data Only; RJ-45 and Terminal Block; 120VAC	
1058D/CP/120	Customer Premise VDSL Modem, Data Only; RJ-45 and Terminal Block; 120VAC	
1058D/CO/UI*	Central Office VDSL Modem, Data Only; RJ-45 and Terminal Block; (UI) 100-240VAC	
1058D/CP/UI*	Customer Premise VDSL Modem, Data Only; RJ-45 and Terminal Block; (UI) 100-240VAC	
1058D-2PK	VDSL Modem Set, Data Only; (Central Office and Customer Premise Unit); No Power Supply	
1058D/120-2PK	VDSL Modem Set, Data Only; (Central Office and Customer Premise Unit); 120VAC	
1058D/UI-2PK*	VDSL Modem Set, Data Only; (Central Office and Customer Premise Unit); (UI) 100-240VAC	
	Available Soon – Call for availability	
1058DRC/CO	Central Office VDSL Modem Rack Card, Data Only; RJ-45 and Terminal Block	
1058DRC/CP	Customer Premise VDSL Modem Rack Card, Data Only; RJ-45 and Terminal Block	

- When ordering standalone units, it is recommended that the 1058D be ordered in sets: one 1058D/CO (Local) and one 1058D/CP (Remote).
- \* =You must specify a country specific power cord







Ordering Information- 1058DV (Data and Voice)		
Model	Description	
1058DV/CO	Central Office VDSL Modem, Data and Voice; RJ-45 and Terminal Block; No Power Supply	
1058DV/CP	Customer Premise VDSL Modem, Data and Voice; RJ-45 and Terminal Block; No Power Supply	
1058DV/CO/120	Central Office VDSL Modem, Data and Voice; RJ-45 and Terminal Block; 120VAC	
1058DV/CP/120	Customer Premise VDSL Modem, Data and Voice; RJ-45 and Terminal Block; 120VAC	
1058DV/CO/UI *	Central Office VDSL Modem, Data and Voice; RJ-45 and Terminal Block; (UI) 100-240VAC	
1058DV/CP/UI*	Customer Premise VDSL Modem, Data and Voice; RJ-45 and Terminal Block; (UI) 100-240VAC	
1058DV-2PK	VDSL Modem Set, Data and Voice; (Central Office and Customer Premise Unit); No Power Supply	
1058DV/120-2PK	VDSL Modem Set, Data and Voice; (Central Office and Customer Premise Unit); 120VAC	
1058DV/UI-2PK*	VDSL Modem Set, Data and Voice; (Central Office and Customer Premise Unit); (UI) 100-240VAC	
	Available Soon – Call for availability	
1058DVRC/CO	Central Office VDSL Modem Rack Card, Data and Voice; RJ-45 and Terminal Block	
1058DVRC/CP	Customer Premise VDSL Modem Rack Card, Data and Voice; RJ-45 and Terminal Block	

- When ordering standalone units, it is recommended that the 1058D be ordered in sets: one 1058DV/CO (Local) and one 1058DV/CP (Remote).
- \* =You must specify a country specific power cord