Products (/products/) > Connectivity (/products/network-connectivity/) > Interface Converters (/products/networkconnectivity/#10) > Industrial RS-232, 422, 485 Converters (/products/network-connectivity/#10) > Connect-IT 2089 View Printable (/products/product\_detail.asp?id=152&v=print)

#### Connect RS-485 Data Acquisition & Control Equipment to a DB-9 (RS-232) Equipped PC or Workstation

# Overview

The Model 2089 is Patton's first high speed EIA-574 (RS-232 on a DB-9) to RS-485 interface converter. Supporting async data rates to 115.2 kbps over one or two unconditioned twisted pair, the Model 2089 passes one control signal in each direction. The Model 2089 can handle up to 50 terminal drops in a multipoint polling environment; yet it is small enough to plug directly into a DB-9 serial port...and requires no AC power or batteries for operation. The Model 2089 has five configuration parameters, allowing the unit to be "fine tuned" to a variety of point-to-point or multipoint applications. Silicon Avalanche Diode surge protection is standard as well. Amazing!

### Features

- Fully Conforms to the EIA RS-485 Standard
- Data Rates to 115,200 bps
- Range Up to 9 Miles (14.5 Km)
- No AC Power or Batteries Required
- Up to 50 Terminal Drops in a Multipoint Polling Environment
- 600 Watts of Silicon Avalanche Diode Surge Protection -Standard
- Made in the USA This Patton equipment is designed by Patton engineers and built in our Gaithersburg, Maryland facility. Patton's American-made manufacturing process delivers high-quality networking solutions with reliability you can trust.

# Specifications

Transmission Format: Asynchronous Data Rate: Up to 115,200 bps Range: Up to 9 miles (14.5km) EIA-574 Interface: DB-9, male or female RS-485 Interface Options: RJ-11 or RJ-45 jack, terminal block with strain relief Transmit Line: 2, 4 wire unconditioned twisted pair Transmit Mode: 4-wire, full or half duplex; 2-wire half duplex Control Signals: DSR turns "ON" immediately after the terminal raises DTR; DCD turns "ON" after recognizing the receive signal from the line; CTS turns "ON" after the terminal raises RTS. RTS/CTS Delay: 0 or 8 msec Carrier: The carrier is switch selected either continuous operation or controlled by RTS Surge Protection: 600W power dissipation at 1 mS Power: Draws operating power from EIA-574 data and control signals; no AC power or batteries required. Temperature: 32° to 122° F (0° to 50° C) Size: 2.50" x 1.20" x 0.75" (6.4 x 3.0 x 1.9 cm)

# Ordering

#	Model #	Description	Availability
1	2089F	RS232/RS485 CONVERTER, DB9F	General Availability
2	2089F RJ11	RS232/RS485 CONVERTER,DB9F/RJ11	General Availability
3	2089F RJ45	RS232/RS485 CONVERTER,DB9F/RJ45	General Availability
4	2089M	RS232/RS485 CONVERTER, DB9M	General Availability
5	2089M RJ11	RS232/485 CONVERTER,DB9M/RJ11	Special Order
6	2089M RJ45	RS232/RS485 CONVERTER,DB9M/RJ45	Special Order

Item Number Item Description

SVC-SmartCare-BH (/support/support.asp) Premium Support for Business Hours

SVC-SmartCare-24/7 (/support/support.asp) Premium Support, 24 x 7 Coverage

SVC-SmartAssist-BH (/support/supportprofessional.asp) Business Hour Support Services

SVC-SmartAssist-AH (/support/support- After Hours Support Services professional.asp) Price Contact us (/howtobuy/) for availability and pricing. Contact us (/howtobuy/) for availability and pricing. Contact us (/howtobuy/) for availability and pricing. Contact us (/howtobuy/) for availability and pricing.

SVC-ENHWAR1 (/support/support- warranty.asp)	1 Year Enhanced Warranty	Contact us (/howtobuy/) for availability and pricing.
SVC-ENHWAR2 (/support/support- warranty.asp)	2 Year Enhanced Warranty	Contact us (/howtobuy/) for availability and pricing. Contact us
SVC-ENHWAR3 (/support/support- warranty.asp)	3 Year Enhanced Warranty	(/howtobuy/) for availability and pricing. Contact us
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SVC-ENHWAR5 (/support/support- warranty.asp)	5 Year Enhanced Warranty	(/howtobuy/) for availability and pricing. Contact us
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SVC-EXTWAR3 (/support/support- warranty.asp)	3 Year Extended Warranty	(/howtobuy/) for availability and pricing.
SVC-EXTWAR4 (/support/support- warranty.asp)	4 Year Extended Warranty	Contact us (/howtobuy/) for availability and pricing.
SVC-EXTWAR5 (/support/support- warranty.asp)	5 Year Extended Warranty	Contact us (/howtobuy/) for availability and pricing.
SVC-NETENG-HOUR (/support/support- professional.asp)	Network technician hour rate for pre-config services, after hours support, etc.	Contact us (/howtobuy/) for availability and pricing.

#### **Related Products**

Model 1000CU2, 1000CU4 & 1000CU8 (/products/product\_detail.asp?id=372) Model 1000R16 (/products/product\_detail.asp?id=371) 2, 4, & 8-Slot ClusterBoxes™ 16-Slot Mini-Rack

Backgrounders FiberPlex Capabilities Guide (/backgrounders/FiberPlex_Capabilities_Statement.pdf)	October 6, 2017			
Certifications				
Declaration of Conformity - Data Communications Devices (/certifications/00109D1- 001P.pdf)	July 16, 2018			
Declaration of Conformity - Data Communication Devices Models: As per the attached sheet (/certifications/00109D1-001M.pdf)	November 11, 2015			
Declaration of Conformity - Data Communication Devices: Short Range Modems, Interface Converters, Multiplexer Models (/certifications/02301D1-001H.pdf)	February 12, 2015			
Data Sheets				
Patton Product Life Cycle Color Codes (/datasheet/Life-Cycle-Availability-Codes.pdf)	April 24, 2015			
Product & Solution Guides				
Enterprise Networking Products Guide (/guides/07MENTNET-PG-lo.pdf)	November 10, 2010			
Tech Notes				
Distance Table for Converter Models 2085 & 2089 (/technotes/technote_100019.pdf) Distance Table for Models 2085, 2089, & 2085RC (/technotes/technote_100017.pdf)	November 11, 1998 December 16, 1997			
User Manuals & Configuration Guides				
Model 2089 Manual (/manuals/2089.pdf)	January 25, 2008			

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> SIP eSBCs (/session-	connectivity/#27)
border-	> Ethernet Over Fiber
controller/#products)	(/products/network-
> VoIP Appliances (/ip-	connectivity/#23)
pbx/#products)	> Multiplexers & Sharing
> SS7 Media Gateways	Devices
(/ss7-	(/products/network-
gateway/#products)	connectivity/#12)
Software and Cloud	> Fiber Telecom
> Virtual SBC (/virtual-	(T1/E1/PRI, Analog and
sbc/#products)	ISDN)
> Virtual Access Router	(/products/network-
(/virtual-access-	connectivity/#28)

router/#products) > Pro AV Live and Media > VPN Server (/vpn-Broadcast Fiber server/#products) Systems > IPv6 to IPv4 Network Gateway (/networkgateway/#products) > Intelligent Edge Orchestration Kits (/intelligent-edgeorchestration/#products)connectivity/#30) > NFV & SDN (/nfv/#products) Network Access Control > Ethernet Extenders (/ethernetextender/#products) > PoE Products Extenders (/poe/#products) > xDSL Products (/xdsl/#products) > Routers (/router/#products) > Dial-Up Access (/dialup/#products) > Baluns

<u>Sunset Products</u> <u>(/products/sunset-products.asp)</u> (/products/networkconnectivity/#29) > SFP (Small Form Pluggable) Modules and (/products/network-> Fiber Alarming, Notification, Relay and (/products/networkconnectivity/#24) > Other Network (/products/networkconnectivity/#13) > Defense/Security **Fiber Communications** (/products/networkconnectivity/#22) (/products/networkconnectivity/#3) > Surge Protectors & **Opto-Isolators** (/products/networkconnectivity/#15) > DataTaps, Testers, Adapters, Rack Kits (/products/networkconnectivity/#7) > Interface Converters (/products/networkconnectivity/#10) > Fiber Rack and **Enclosure Systems** (/products/networkconnectivity/#25) > Fiber Repeaters and Wavelength Division Multiplexers (WDM) (/products/networkconnectivity/#26) > Waveguide RF Filters

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