

[Products \(/products/\)](#) > [Connectivity \(/products/network-connectivity/\)](#) > [Interface Converters \(/products/network-connectivity/#10\)](#) > [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	Price
SVC-SmartCare-BH (/support/support.asp)	Premium Support for Business Hours	Contact us (/howtobuy/) for availability and pricing. Contact us (/howtobuy/)
SVC-SmartCare-24/7 (/support/support.asp)	Premium Support, 24 x 7 Coverage	for availability and pricing. Contact us (/howtobuy/)
SVC-SmartAssist-BH (/support/support-professional.asp)	Business Hour Support Services	for availability and pricing. Contact us (/howtobuy/)
SVC-SmartAssist-AH (/support/support-professional.asp)	After Hours Support Services	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.
SVC-ENHWAR3 (/support/support-warranty.asp)	3 Year Enhanced Warranty	Contact us (/howtobuy/) for availability and pricing.
SVC-ENHWAR4 (/support/support-warranty.asp)	4 Year Enhanced Warranty	Contact us (/howtobuy/) for availability and pricing.
SVC-ENHWAR5 (/support/support-warranty.asp)	5 Year Enhanced Warranty	Contact us (/howtobuy/) for availability and pricing.
SVC-EXTWAR2 (/support/support-warranty.asp)	2 Year Extended Warranty	Contact us (/howtobuy/) for availability and pricing.
SVC-EXTWAR3 (/support/support-warranty.asp)	3 Year Extended Warranty	Contact us (/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) November 11, 1998

Distance Table for Models 2085, 2089, & 2085RC (/technotes/technote_100017.pdf) December 16, 1997

User Manuals & Configuration Guides

Model 2089 Manual (/manuals/2089.pdf) January 25, 2008

Company (/company/)

- > Contact Us (/company/contact-us.asp)
- > About Patton (/company/about.asp)
- > Jobs (/company/careers/)
- > Capabilities (/products/special/services.asp)
- > Quality & Responsibility (/company/environment/)
- > Legal (/legal/)

News & Events

- > Press Room/Releases (/press/)
- > Training & Events (/training/)
- > Library/Downloads (/resources/)

Partners & Resources (/partners/)

- > Partner Programs (/partners/)
- > Resources (/resources/)
- > Blog (https://blog.patton.com)

Products

(/products/)

Unified Communications

- > VoIP Gateways (/voip-gateway/#products)
- > VoIP Routers (/voip-router/#products)
- > VoIP IADs (/voip-iad/#products)
- > SIP eSBCs (/session-border-controller/#products)
- > VoIP Appliances (/ip-pbx/#products)
- > SS7 Media Gateways (/ss7-gateway/#products)

Software and Cloud

- > Virtual SBC (/virtual-sbc/#products)
- > Virtual Access Router (/virtual-access-

Connectivity

- > Line Drivers / Short Range Modems (/products/network-connectivity/#11)
- > Fiber Serial DataCom (RS-232/422/530/188C) (/products/network-connectivity/#27)
- > Ethernet Over Fiber (/products/network-connectivity/#23)
- > Multiplexers & Sharing Devices (/products/network-connectivity/#12)
- > Fiber Telecom (T1/E1/PRI, Analog and ISDN) (/products/network-connectivity/#28)

router/#products)	> Pro AV Live and Media
> VPN Server (/vpn-server/#products)	Broadcast Fiber Systems
> IPv6 to IPv4 Network Gateway (/network-gateway/#products)	(/products/network-connectivity/#29)
> Intelligent Edge Orchestration (/intelligent-edge-orchestration/#products)	> SFP (Small Form Pluggable) Modules and Kits
> NFV & SDN (/nfv/#products)	(/products/network-connectivity/#30)
<u>Network Access</u>	> Fiber Alarming, Notification, Relay and Control
> Ethernet Extenders (/ethernet-extender/#products)	(/products/network-connectivity/#24)
> PoE Products (/poe/#products)	> Other Network Extenders
> xDSL Products (/xdsl/#products)	(/products/network-connectivity/#13)
> Routers (/router/#products)	> Defense/Security Fiber Communications
> Dial-Up Access (/dial-up/#products)	(/products/network-connectivity/#22)
	> Baluns
<u>Sunset Products</u>	(/products/network-connectivity/#3)
(/products/sunset-products.asp).	> Surge Protectors & Opto-Isolators
	(/products/network-connectivity/#15)
	> DataTaps, Testers, Adapters, Rack Kits
	(/products/network-connectivity/#7)
	> Interface Converters
	(/products/network-connectivity/#10)
	> Fiber Rack and Enclosure Systems
	(/products/network-connectivity/#25)
	> Fiber Repeaters and Wavelength Division Multiplexers (WDM)
	(/products/network-connectivity/#26)
	> Waveguide RF Filters

Support & Services (/support/)

- > Support Home (/support/)
- > Support Portal (/support/#portal)
- > Premium Support (/support/support.asp)
- > Software Upgrades (/support/upgrades/)
- > Warranty Services (/support/support-warranty.asp)
- > Returns & RMAs (/returns/)
- > Manuals (/manuals/)

Special Projects Group (SPG) (/products/special)

- > SPG Home (/products/special/)
- > Services & Capabilities (/products/special/services.asp)
- > Projects (/products/special/projects.asp)
- > Facilities (/products/special/facilities.asp)



Select your country

Sales: sales@patton.com (mailto:sales@patton.com) / +1 301 975 1000

Support: support@patton.com (mailto:support@patton.com) / +1 301 975 1007

Have Us Contact You

or

Copyright © 2001–2020 Patton Electronics Co., All Rights Reserved.

Join Our Email List





Connect With Us



(<https://twitter.com/pattonconnect>)



(<https://www.linkedin.com/company/patton-electronics>)

| [Sitemap \(/company/sitemap.asp\)](/company/sitemap.asp) | [Legal \(/legal/\)](/legal/) | [Privacy Policy \(/legal/privacy.asp\)](/legal/privacy.asp) | [Disclaimer \(/legal/terms-conditions.asp\)](/legal/terms-conditions.asp) |  (<https://www.facebook.com/PattonElectronics>) |  (<https://www.youtube.com/user/pattonelectronic sco>) |  (<https://www.linkedin.com/companies/patton-electronics>) |  (</news.rss>)