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### *This Optically Isolated Converter has Multiple Functions*

## Overview

The Patton Model 2018 is an optically isolated, multi-function RS-232 to 20mA current loop converter: Hook it up to an active 20mA current loop circuit and it's a passive converter. Hook it up to a passive 20mA current loop circuit, add DC power to one of several DB-25 interface pins, and it's an active converter. Connect two units together, supply DC power to one interface, and it's an optically isolated RS-232 distance extender.

The Model 2018 supports data rates to 19.2 Kbps, and current loop distances to 4 miles (6.4Km) over two twisted pair. The Model 2018 connects directly to either the RS-232 interface or the 20mA current loop interface using a male or female DB-25 connector. An external DCE/DTE switch eliminates the need for RS-232 crossover cables.

## Features

- Operates Actively or Passively
- Data Rates from 50 bps to 19.2 kbps
- Range to 4 Miles (6.4Km) over Two 24 AWG (.5mm) Twisted Pair
- No AC Power Required; Draws Necessary Power for (Passive) Operation from RS-232 Interface
- Optically Isolated on Line Side
- DB-25 Connectors on Both Ends
- External DCE/DTE Switch
- Two Units Work Together as Optically Isolated RS-232 Distance Extenders
- **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

**Interfaces:** Asynchronous

**Transmit Line:** 19 - 26 AWG (.9mm - .4mm)

**Range:** 4 miles (6.4Km) on 24 AWG twisted pair

**Interfaces:** EIA RS-232, CCITT V.24 (.5 mm) full duplex, 20mA current loop

**Data Rate:** 50 - 19.2 Kbps

**Isolation:** 2500V RMS via opto-isolators on line side

**Connectors:** Male or female DB-25 on both sides

**Temperature Range:** 0-50°C (32-122°F)

**Altitude:** 0-15,000 feet (4.5Km)

**Humidity:** Up to 95% non-condensing

**Power Supply:** None required; uses power from NIC data signals

**Dimensions:** 2.21" L x 0.8" H x 2.10" W (5.6 x 2.0 x 5.3 cm)

**Weight:** 1.7 oz.

# Ordering

#	Model #	Description	Availability
1	2018F-M	RS-232 (DB25 female) to 20mA current loop converter (DB25 male)	General Availability
2	2018M-F	RS-232 (DB25 male) to 20mA current loop converter (DB25 female)	General Availability

Item Number	Item Description	Price
SVC-SmartCare-BH (/support/support.asp)	Premium Support for Business Hours	Contact us (/howtobuy/) for availability and pricing.
SVC-SmartCare-24/7 (/support/support.asp)	Premium Support, 24 x 7 Coverage	Contact us (/howtobuy/) for availability and pricing.
SVC-SmartAssist-BH (/support/support-professional.asp)	Business Hour Support Services	Contact us (/howtobuy/) for availability and pricing.
SVC-SmartAssist-AH (/support/support-professional.asp)	After Hours Support Services	Contact us (/howtobuy/) for availability and pricing.

SVC-ENHWAR1 (/support/support-warranty.asp)	1 Year Enhanced Warranty	Contact us (/howtobuy/) for availability and pricing. Contact us (/howtobuy/) for availability and pricing. 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 (/howtobuy/) for availability and pricing. Contact us (/howtobuy/) for availability and pricing.
SVC-ENHWAR3 (/support/support-warranty.asp)	3 Year Enhanced Warranty	Contact us (/howtobuy/) for availability and pricing. Contact us (/howtobuy/) for availability and pricing. Contact us (/howtobuy/) for availability and pricing.
SVC-ENHWAR4 (/support/support-warranty.asp)	4 Year Enhanced Warranty	Contact us (/howtobuy/) for availability and pricing. Contact us (/howtobuy/) for availability and pricing. Contact us (/howtobuy/) for availability and pricing.
SVC-ENHWAR5 (/support/support-warranty.asp)	5 Year Enhanced Warranty	Contact us (/howtobuy/) for availability and pricing. Contact us (/howtobuy/) for availability and pricing. Contact us (/howtobuy/) for availability and pricing.
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SVC-EXTWAR3 (/support/support-warranty.asp)	3 Year Extended Warranty	Contact us (/howtobuy/) for availability and pricing. Contact us (/howtobuy/) for availability and pricing. Contact us (/howtobuy/) for availability and pricing.
SVC-EXTWAR4 (/support/support-warranty.asp)	4 Year Extended Warranty	Contact us (/howtobuy/) for availability and pricing. Contact us (/howtobuy/) for availability and pricing. Contact us (/howtobuy/) for availability and pricing.
SVC-EXTWAR5 (/support/support-warranty.asp)	5 Year Extended Warranty	Contact us (/howtobuy/) for availability and pricing. Contact us (/howtobuy/) for availability and pricing. 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. Contact us (/howtobuy/) for availability and pricing. Contact us (/howtobuy/) for availability and pricing.

## 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

Model 2018 Passive or Active Configuration: Don't burn it up!  
(/technotes/technote\_100014.pdf)

June 12, 1999

## User Manuals & Configuration Guides

Model 2018 Manual (/manuals/2018.pdf)

March 31, 1994

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> SFP (Small Form Pluggable) Modules and Kits

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