#### PATTON ELECTRONICS COMPANY

# PRODUCT QUICK REFERENCE



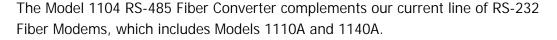
Product Model 1104

Product Name RS-485 Fiber Converter

Product Manager Bob Thompson Contact <u>Thompson@patton.com</u>

#### Who is the customer for this product?

We sell this product to industrial, utility, and hospital customers that need to extend and/or protect their RS-485 communications links from noisy environments. The Model 1104 offers immunity to environmental interference and can extend 2-wire, half-duplex RS-485 links up to 2 Km over dual multi-mode fiber.





Model 1104 Features and Benefits		
Allows RS-485 2-wire, half-duplex connections over dual multi-mode fiber	Immunity from environmental interference (EMI/RFI) and data security	
Distances up to 2 Km	Extends links past the standard RS-485 distance limitation	
Data rates up to 115.2 Kbps	High speed connections and flexibility	
Multiple RS-485 Connector Options including DB-25 Female, DB-25 Male, and Terminal Block	Flexible connections to a variety of RS-485 devices	
Universal Power Supply (100-240 VAC)	Flexible and convenient to install	

## **Applications**

The drawing below displays a typical industrial type application where a pair of Model 1104 RS-485 Fiber Converters connect a Process Controller to a remote Terminal or PLC (Programmable Logic Controller) over dual multi-mode fiber. The Model 1104 can be used for different PLC applications, environmental control systems, patient monitoring systems, and many other applications.



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Ordering information		
Model	Description	
1104F-ST	RS-485 Fiber Converter, DB-25 Female, ST Fiber, UI Power Supply	
1104M-ST	RS-485 Fiber Converter, DB-25 Male, ST Fiber, UI Power Supply	
1104TB-ST	RS-485 Fiber Converter, Terminal Block, ST Fiber, UI Power Supply	

#### **Optional parts**

None. The Units are shipped complete with:

- 1104 Unit
- External Universal Power Supply (100-240 VAC)
- User Manual

**Note:** Fiber cables are not included. Multi-Mode cables required are  $62.5/125\mu$ . Country specific power cords are ordered separately.

Replacement parts		
Part Number	Description	
08055-U-9-1	External Universal Input Power Supply (100–240 VAC Input, 9 VDC 1A Output)	

## **Shipping/Export Information**

ECCN export number: 8517501000

Country of origin: United States of America, NAFTA

Total weight boxed: 1 lb. (0.454 kg)

Individual unit: 2 oz. (56.7 g)

## MTBF/Repair Information

MTBF: 1,134,000 Hrs. Calculation based on MIL-HDBK-217F, Notice 2 - "Parts Count Reliability Prediction"

Mean time to repair: 2 – 3 days

Warranty: 1-year parts and labor.

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Out of warranty repair rate: \$80.00, flat rate – contact Tech Support for details.

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## **Physical Specifications**

**Dimensions:** 3.55" L x 2.1" W x .8" H (9.017 L x 5.334 W x 2.032 D cm)

Color: Black 2-piece case with white and black label

Case material: Plastic, fire retardant

### **Environmental**

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

**Storage Temp:** -13 to 185°F (-25 to +85°C)

Relative Humidity: 5 to 95% 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 directive 89/336/EEC	FCC part 15, Class A	N/A		

## **Power Supplies**

#### **Standalone**

AC: Universal input, 100-240VAC, 50-60Hz, external (Output 9 VDC 1A)