# FT8332/FR8332 Fiber Transmitter and Receiver

## **32-CHANNEL DIGITALLY ENCODED VIDEO**

#### **Product Features**

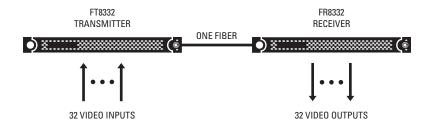
- 8-Bit Digitally Encoded Video for High-Quality Multichannel Video Transmission over a Single Fiber
- Multimode Fiber Support for Distances up to 1 km
- Single-Mode Fiber Support for Distances up to 26 km
- Exceeds All Requirements for the RS-250C Medium-Haul Transmission Specification
- · Coarse Wavelength Division Multiplexing (CWDM)
- · Compatible with NTSC, PAL, and SECAM Video Standards
- · Laser Diode for Transmission of Optical Signals
- No Performance Adjustments Required
- 12 VDC or 24 VAC Power Supply
- Stand-Alone and Rack-Mountable Design
- LED Indicators for Monitoring of Signal Status, Laser Status, and Operating Power





The FT8332/FR8332 fiber transmitter and receiver provide the ability to transmit up to 32 composite video channels over one optical fiber. Using coarse wavelength division multiplexing (CWDM) technology, the FT8332 transmitter and the FR8332 receiver provide a cost-effective solution for transmitting multiple channels over fiber by allowing multiple wavelengths to be transmitted in a single fiber. The FT8332 transmitter and the FR8332 receiver are available in multimode and single-mode versions.

The **FT8332** and **FR8332** units can be rack mounted into an industry-standard 19-inch equipment rack or can be used as stand-alone units by being placed on a desktop or mounted to a wall. The WM5300 wall mount kit is required to mount an **FT8332/FR8332** unit to a wall.













#### **MODELS**

Model Number		Fiber Optic		Optical	_ Maximum
Transmitter	Compatible Receiver	Connector Type	Wavelengths	Power Budget	Transmission Distance
·	Mı	ultimode (62.5/125 μm)			
FT8332MSTR	FR8332MSTR	ST	1350 nm 1325 nm 1300 nm 1275 nm	18 dB* <sup>†</sup>	1 km (0.6 mi) <sup>‡</sup>
	Si	ngle-Mode (9/125 μm)			
FT8332SSTR	FR8332SSTR	ST	1350 nm 1325 nm 1300 nm 1275 nm	18 dB*	26 km (16.1 mi) <sup>§</sup>

<sup>\*</sup>Optical power budget is 15 dB when operating temperature range is -40° to 0°C.

#### Notes:

- Conformal coated models are available upon request. Contact the factory for additional information.
- For models with higher optical power budgets, contact the factory.

#### **Supplied Accessories**

 Regulated switching power supply with three power cords (North American, United Kingdom, and European); 90-264 VAC, 47-63 Hz input, 12 VDC (66 W) output

**Note:** In extreme temperature conditions, it is recommended that an industrial-rated outdoor power supply be used.

• Rack mount kit (brackets, rails, and hardware)

#### **VIDEO**

Number of Channels 32

Modulation Type Pulse code modulation, 8-bit resolution
Video Input (FT8332)/ 1.0 Vp-p, 75 ohms; NTSC, PAL, and SECAM

Video Output (FR8332)

Bandwidth 6.5 MHz Gain Unity

Crosstalk -50 dB typical at 3.58 MHz

Differential Gain <1% Differential Phase <1.2° Tilt <1%

Signal-to-Noise Ratio >60 dB (CCIR weighted)

### **RELAY**

Relay Output 30 VDC, 1 A

Choice of normally open or normally closed

#### **GENERAL**

Operating Temperature  $-40^{\circ}$  to  $167^{\circ}$ F ( $-40^{\circ}$  to  $75^{\circ}$ C) Input Power Requirements 12 VDC or 24 VAC, 1.5 A

LED Indicators Power

Video Present (per channel)

TX Optical Link Loss (per set of 8 video

channels)

RX Optical Link Loss (per set of 8 video

channels)

Dimensions 16.7" D x 17.0" W x 1.7" H

(42.4 x 43.2 x 4.3 cm)

Unit Weight 11.4 lb (5.17 kg) Shipping Weight 19 lb (9 kg)

#### **MECHANICAL**

Connectors

Video BNC (per channel)
Rack Power 6-pin connector
Stand-Alone Power 5-mm barrel connector

Fiber Optic ST for multimode and single-mode fiber

Auxiliary Relay 3-pin header
Construction Steel cabinet

Finish Bezel: gray metallic with black end caps

Chassis: black matte finish

#### **CERTIFICATIONS**

- CE, Class AFCC, Class A
- UL/cUL Listed
- · C-Tick
- Complies with FDA requirements for Class 1 laser products

#### **OPTIONAL ACCESSORIES**

EPS5000-120 External rack power supply, 1 RU, dual 120 W

power outputs

WM5300 Wall mount kit



<sup>&</sup>lt;sup>†</sup>When using 50/125 µm multimode fiber, subtract 3 dB from the optical power budget.

<sup>\*</sup>Maximum transmission distance is limited by fiber bandwidth.

Maximum transmission distance is based on attenuation of 0.5 dB/km plus a 5 dB buffer for connector and splice losses.