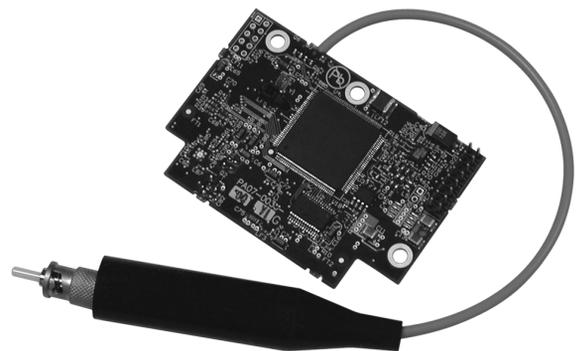


# FS85011A Fiber Transmitter

## SINGLE-CHANNEL DIGITALLY ENCODED VIDEO WITH BIDIRECTIONAL DATA

### Product Features

- Designed for Use in Spectra III™ and Spectra® IV Domes and in the ExSite® Explosionproof Positioning System
- 8-Bit Digitally Encoded Video for High-Quality Video Transmission over a Single Fiber
- Bidirectional RS-422 Data Channel or Coaxitron® Communication
- Patent-Pending Transmission Technology Allowing Coaxitron Control at Full-Distance Capabilities
- Compatible with the FR85011A/FR85011 Fiber Receiver
- Integrated Wavelength Division Multiplexing (WDM) in a Single Fiber
- Multimode Fiber Support for Distances up to 6 km
- Single-Mode Fiber Support for Distances up to 46 km
- Laser Diode for Transmission of Optical Signals
- Exceeds All Requirements for the RS-250C Medium-Haul Transmission Specification
- Compatible with NTSC, PAL, and SECAM Video Standards
- No Performance Adjustments Required
- LED Indicator for Monitoring of Signal Status

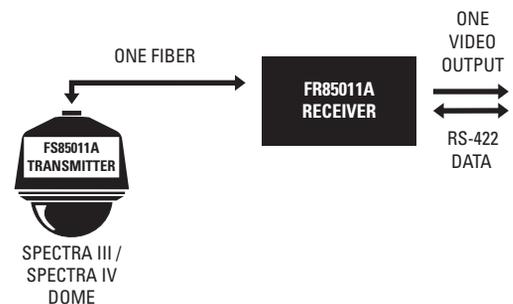


FS85011A FIBER TRANSMITTER WITH 6-INCH CABLE

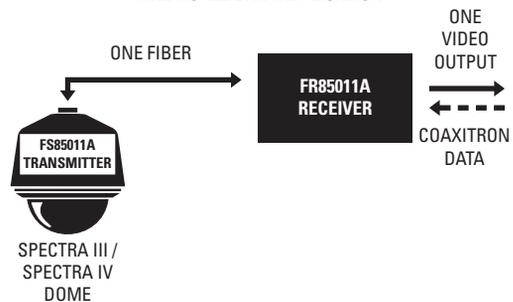
The **FS85011A** fiber transmitter is designed for quick and easy installation into the back box of Spectra III™ and Spectra® IV domes or can be included as part of an ExSite® explosionproof positioning system at the factory. The **FS85011A** transmitter provides the ability to send one unidirectional composite video channel and one bidirectional RS-422 data channel over one optical fiber. In addition, patent-pending technology provides the solution for allowing Coaxitron® pan/tilt/zoom (PTZ) control data to be transmitted the full distance of the fiber. Available in multimode and single-mode versions, the **FS85011A** transmitter is compatible with the FR85011A/FR85011 receiver.

A jumper on the **FS85011A** transmitter provides the unique capability to select RS-422 or Coaxitron data communication. The selection of RS-422 data communication allows PTZ control of the Spectra III/Spectra IV dome or of the ExSite positioning system. With Coaxitron control, PTZ control signals are transmitted over video coaxial cable from the controller to the FR85011A/FR85011 receiver. The receiver then transmits the Coaxitron data onto the fiber to the **FS85011A** transmitter. The Coaxitron data is transmitted from the controller to the Spectra III/Spectra IV dome or to the ExSite positioning system during the vertical blanking interval of the video signal.

The **FS85011A** transmitter operates using power supplied from the Spectra III/Spectra IV dome or from the ExSite positioning system.



SINGLE-CHANNEL VIDEO AND RS-422 DATA APPLICATION



SINGLE-CHANNEL VIDEO AND COAXITRON DATA APPLICATION



# TECHNICAL SPECIFICATIONS

## MODELS

Model Number		Fiber Optic Connector Type	Wavelength (Video/Data)	Optical Power Budget	Maximum Transmission Distance	Cable Length
FS85011A Transmitter	Compatible Receiver*					
<b>Multimode (62.5/125 μm)</b>						
FS85011AMST	FR85011AMSTR	ST	1310/850 nm	26 dB†	6 km (3.7 mi)‡	6 inches (15.24 cm)
	FR85011MSTR	ST	1310/850 nm	20 dB†	6 km (3.7 mi)‡	6 inches (15.24 cm)
FS85011AMSTEX	FR85011AMSTR	ST	1310/850 nm	26 dB†	6 km (3.7 mi)‡	6 ft (1.83 m)
	FR85011MSTR	ST	1310/850 nm	20 dB†	6 km (3.7 mi)‡	6 ft (1.83 m)
<b>Single-Mode (9/125 μm)</b>						
FS85011ASST	FR85011ASSTR	ST	1310/1550 nm	28 dB	46 km (28.6 mi)§	6 inches (15.24 cm)
	FR85011SSTR	ST	1310/1550 nm	20 dB	30 km (18.6 mi)§	6 inches (15.24 cm)
FS85011ASSTEX	FR85011ASSTR	ST	1310/1550 nm	28 dB	46 km (28.6 mi)§	6 ft (1.83 m)
	FR85011SSTR	ST	1310/1550 nm	20 dB	30 km (18.6 mi)§	6 ft (1.83 m)
FS85011ASFC	FR85011ASFCR	FC	1310/1550 nm	28 dB	46 km (28.6 mi)§	6 inches (15.24 cm)
	FR85011SFCR	FC	1310/1550 nm	20 dB	30 km (18.6 mi)§	6 inches (15.24 cm)

\*Single-channel fiber optic video receiver/data transceiver.

†When using 50/125 μm multimode fiber, subtract 3 dB from the optical power budget.

‡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.

**Note:** For models with higher optical power budgets, contact the factory.

## Supplied Accessories

Fiber optic adapter (ST to ST, FC to ST, or FC to FC)

## VIDEO

Number of Channels	1
Modulation Type	Pulse code modulation, 8-bit resolution
Video Input	1.0 Vp-p, 75 ohms; NTSC, PAL, and SECAM
Bandwidth	6.5 MHz
Gain	Unity
Differential Gain	<2%
Differential Phase	<1°
Tilt	<1%
Signal-to-Noise Ratio	>60 dB (CCIR weighted)

## DATA

Number of Channels	1
Data Communication	RS-422, Coaxitron

## GENERAL

Operating Temperature	Refer to the Spectra III, Spectra IV, or ExSite product specification sheet as appropriate.
Input Power Requirements	12 VDC, 160 mA
LED Indicator	Optic Fault
Dimensions	2.9" L x 2.0" W (7.37 x 5.08 cm)
Unit Weight	0.08 lb (0.04 kg)
Shipping Weight	1.0 lb (0.45 kg)

## MECHANICAL

### Connectors

Video/Data/Power	16-pin header
Data Selection	2-pin header
Fiber Optic	ST for multimode fiber ST or FC for single-mode fiber

## CERTIFICATIONS

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

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