

Wideband IF Transmission System

INST/INSR-1401

For Cost-effective Analog SATCOM IF Applications

The **LuxLink**® INST/INSR-1401 system consists of the INST-1401 transmitter and INSR-1401 receiver. The system utilizes linear intensity modulation to transmit wideband SATCOM and similar microwave IF signals over distances of several miles.

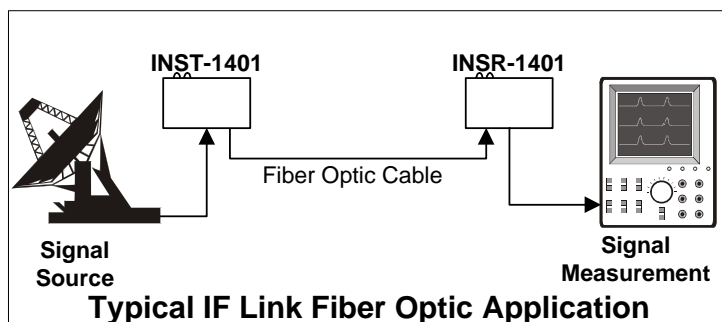
The system operates with standard single-mode optical fiber and installation only requires a simple one-minute gain adjustment. In addition, integral LEDs are provided on both units to continuously indicate the presence of repetitive signals as well as the presence of operating power making system troubleshooting simple.



Technical Specifications

System Bandwidth (± 0.5 dB)	70 MHz (± 20 MHz) 140 MHz (± 20 MHz)
Input/Output Impedance	50 ohms
Input/Output Level	-7 dBm to -30 dBm
Noise Figure*	40 dB typical
Linearity*	3.0% minimum
Link Gain	0 dB \pm 5dB (adjustable)
Operating Wavelength	1310 or 1550nm
Optical Output Power	- 5 dBm typical
Optical Input Power	-3dBm (500uW) Max
Optical Loss Budget	0 to 10 dB
Optical Connectors	FC/PC
Signal Connector	BNC
Operating Temperature	-35° to +75°C
Power Requirements**	11-24 VAC/DC @ 250 mA
Relative Humidity	0 – 95% non-condensing
Physical Size (mm)	5.0"(127)x3.0"(76)x1.0"(25.4)

*Measured with 100 meters of 8/10u single-mode fiber.
Note that all specifications are subject to change without prior notice.



Important Features

- **70 MHz/140 MHz IF link**
- **Signal/Power Indicators**
- **Standard Single-mode Fiber Compatibility**
- **Stand-alone, DIN or Rack Mountable (same unit)**

Ordering Information

Transmitter INST-1401-X
Receiver INSR-1401-X

"X" = Wavelength/Fiber

-7 = 1310nm Single-mode
-9 = 1550nm Single-mode

**For stand-alone operation order a PS-1205 power supply for each unit.

**For rack mounted operation all operating power is provided by power supply used with the rack mounting panel.

LuxLink®

Fiber Optic Transmission Systems

www.LuxLink.com
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