# Low Noise Analog

# **INST/INSR-1101**

## For Low Noise Analog Instrumentation Applications

The LuxLink® INST/INSR-1101 system consists of the INST-1101 transmitter and INSR-1101 receiver. Both units utilize intensity modulation to transmit low noise analog signals for a host of laboratory and instrumentation applications.

Both multimode and single-mode versions are available and installation only requires a simple one-minute calibration adjustment. Integral indicators 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.

20 Hz to 20 KHz (+0,-3dB)

1 Vpp (2 Vpp into 10K Load)

1 Volt peak to peak

1 millivolt pp typical

25 ns + 1ns/foot of fiber

850, 1310 or 1550nm

0-10 dB (multimode) 0-10 dB (single-mode)

FCPC (single-mode)

Removable terminal block

11-24 VAC/DC @150 mA

<95% non condensing

3.0% maximum

3.0° maximum

35 ns minimum

ST (multimode)

-35° to +75°C

>120,000 hours

**BNC** 

600 ohms



### **Technical Specifications**

System Bandwidth (minimum)

Input/Output Impedance Input Level **Output Level** Noise Level Linearity \* Phase Shift\* System Delay\* Rise/Fall time

**Operating Wavelength Optical Loss Budget** 

**Optical Connectors** 

Signal Connector **Power Connector** Operating Temperature

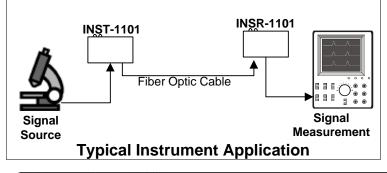
Humidity

MTBF (per MIL HBK 217)

Power Requirements Physical Size (mm)

5.0"(127)x3.0"(76)x1.0"(25.4) \* Measured with 1Km of 62.5u multimode fiber.

Note that all specifications are subject to change without prior notice.



# **Important Features**

- 20 KHz Signal Bandwidth
- 1 mv pp Noise Level
- Signal & Power Indicators
- Multimode or Single-mode versions
- Stand-alone, DIN or Rack Mountable (same unit)

#### **Ordering Information**

Transmitter, INST-1101-X Receiver, INSR-1101-X

"X" = Wavelength/Fiber

-1 = 850nm Multimode

-3 = 1310nm Multimode

-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.



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