

## UNIVERSAL SENSOR

## INST/INSR-3001

### For Remote Sensor Signal Transmission Applications

The **Luxlink™** INST/INSR-3001 system consists of the INST-3001 transmitter and INSR-3001 receiver. Both units transmit most common industrial sensor signals from point-to-point using interference-free fiber optic transmission technology. The system is user configurable (via DIP switch settings) and fully compatible with 0/20 or 4/20ma analog or digital current loops as well as 0 to ±1, to ±3 or to ±10 Volt analog DC voltage signals and may also be used to convert from one protocol to another.

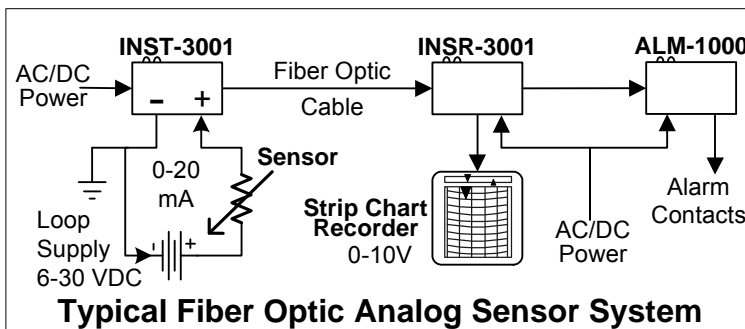
In addition integral indicators are provided on both units to continuously indicate the presence of signals as well as operating power making system troubleshooting simple.



### Technical Specifications

System Bandwidth (minimum)	DC to 80 KHz(3dB), 100(6dB)
System Response Time	5 $\mu$ s typical
Rise Time	5 $\mu$ s typical
Current Modes	0 to 20 mA, or 4 to 20 mA.
Voltage Modes (output load minimum)	$\pm$ 1V (50 $\Omega$ ), $\pm$ 3V (300 $\Omega$ ) or $\pm$ 10 V (1K $\Omega$ )
Accuracy / Linearity	0.24% typical (full scale @1Khz)
Signal / Noise Ratio	60 dB minimum
Output Load Capacitance	10nF maximum
Drift	100 ppm/ $^{\circ}$ C full scale
Operating Wavelength	850, 1310 or 1550nm
Optical Output Power	-16 dBm (multi-mode) -16 dBm (single-mode)
Optical Loss Budget	0-13 dB (multi-mode) 0-13 dB (single-mode)
Optical Connectors	ST (multi-mode) FCPC (single-mode)
Signal Connector	Removable terminal block for V or mA, BNC for V only
Operating Temperature	-35 $^{\circ}$ to +75 $^{\circ}$ C
Power Requirements*	11-24 VAC/DC @350 mA
Physical Size (mm)	5.0" (127) x 3.0" (76) x 1.0" (25.4)

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



### Important Feature

- **5  $\mu$ s Response Time**
- **80 KHz Signal Bandwidth**
- **Protocol Conversion**
- **Link & Power Indicators**
- **Stand-alone or Rack Mountable (same unit)**

### Ordering Information

Transmitter	INST-3001-X
Receiver	INSR-3001-X

"X" = Wavelength/Fiber  
 -1 = 850nm Multi-mode  
 -3 = 1310nm Multi-mode  
 -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.