Terahertz Technologies Inc.

TIA-950
O/E Converter

Benefits:

- 900 nm to 1700 nm wavelengths
- Gain Switch 1X and 10X
- Battery Operation
- Bandwidth to 750 MHz
- BNC Connects to Oscilloscope
- AC or DC Interstage Coupling

The TIA-950 is the optimum instrument for the laboratory or for field use. This optical receiver can be used with a wide range of oscilloscopes and digitizers to provide the utility of a convenient, easy to use fiber optic probe. This compact unit mounts directly on the BNC input of an oscilloscope. Energizing the unit, the optical signal presented to it is faithfully reproduced on the CRT of the oscilloscope or digitizer.

Applications for this instrument include: checking the output of fiber optic communication links, data links, fiber optic computer networks, the operation of laser sources, and the signal from an optical transmitter.

Adapters are available for fiber optic connector compatibility.

Gains are switch selected and provide peak responsivity values of approximately 1200 to 12000 volts per watt at the peak of the detector response curve.

AC coupling between stages may be introduced so that weak signals in the presence of a strong DC signal may be examined.

The TIA-950 electrical bandwidth exceeds 750 MHz in the low gain position and 250 MHz in the high gain position.

The output stage of the TIA-950 is fully capable of driving a 50 ohm coaxial cable terminated in its characteristic impedance.

The InGaAs detector covers the 900 to 1700 nm spectral region.The TIA-950 comes standard with a FC fiber optic connector.

Powered by a 9V Lithium battery, the TIA-950 provides true electrical isolation from power lines and ground loops. A universal wall-mount power supply is provided as well.

TIA-950 Specifications

TTI reserves the right to chnage specifications w/o notice

Detector Type	**InGaAs (900 -1700nm)**
Transimpedance	**1.2 K**
Post Amplifier Gain	**1.0, 10.0 selectable**
Maximum Linear Input Power	**0.8 mW**
Maximum Input Without Damage	**10mW**
Bandwidth (-3 dB)	**DC to 750 MHz at Gain of 1.0 DC to 250 MHz at Gain of 10.0**
Output Impedance	**50 Ohms**
Output Connector	**Male BNC**
Fiber Optic Input Connector	**FC**
Input Numerical Aperture	**0.29**
Interstage Coupling	**DC or AC (100 Hz frequency cut off)**
Output Offset Voltage	**<+/-0.75 V at max gain**
Maximum Output Voltage	**2 V pk-pk, no load, 1 V pk-pk, 50Ω load**
Noise Level	**3 pW/Hz$^{1/2}$**
Power Required	**9 V Lithium Battery, Universal wall mount supply, 95-260 VAC, 50-60 Hz, US, UK, Euro and Australian plugs are supplied**
Dimensions	**1.2″ W, 2.5″ L, 1.5″ H,(30.5mm,63mm,38mm)**
Weight	**5 oz, 150 g**
Operating Temperature	**0 - 40C**
Limited Warranty	**2 years from date of receipt**

We Welcome the Challenge of Custom Applications
Call, Fax, or E-mail us Your Requirements

Terahertz Technologies Inc.

Terahertz Technologies Inc.
169 Clear Road
Oriskany, New York 13424 USA
(315) 736-3642 Fax (315) 736-4078
www.terahertztechnologies.com
Email: sales@terahertztechnologies.com