



## TIA-952 Optical to Electrical Converter

### Features:

- Large Area InGaAs detector
- 800 MHz Analog Bandwidth
- Selectable Gain Settings
- Universal Power Supply
- Capability to drive 50 Ohm output loads
- For use for Single or Multi Mode Fibers



### Applications:

- General laboratory testing of optical components
- Field Service Testing and Troubleshooting
- Laser alignment and tuning
- Plasma physics measurements

The **TIA-952** optical receiver is a convenient, easy to use O/E converter. It is extremely useful in a variety of laboratory, factory, and field service situations where a quick check of the operation of a laser source, optical transmitter, or the throughput of a fiber optic communications link is required. The unit conveniently mounts directly on the vertical input BNC connector of your oscilloscope, digitizer, or other readout device.

The large area Indium-Gallium-Arsenide detector provided is optimized for use with both single mode and multi mode fibers and covers the 900 to 1700 nm spectral region. Gains are switch selectable and provide peak responsivity values of approximately 500 and 2500 volts per watt. The electrical bandwidth of the **TIA-952** exceeds 800 MHz using the low gain setting and exceeds 300 MHz in the high gain mode.

The units output stage is fully capable of driving a 50 ohm coaxial cable terminated in its characteristic impedance. Fiber connector options include either ST or FC receptacles. Powered by a universal wall mount power supply (90 - 260 VAC, 50-60 Hz with four mains adaptors) , the **TIA-952** is handy to use and store.

The ease of use and convenience of this instrument are matched only by the high performance-to-price ratio that is typical of products from Terahertz Technologies. It is also backed by our standard two year warranty and guarantee of satisfaction.

## Terahertz Technologies Inc.

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## TIA-952 Specifications

Detector Type	Large area InGaAs
Analog Signal Bandwidth (-3 dB)	30 KHz to 800 MHz, Low gain, 30 KHz to 300 MHz High Gain
Selectable Responsivity Settings	500 V/W or 2500 V/W @ 1550 nm when terminated in a 50 Ohm Load
Maximum Linear Input Power	2 mW
Maximum Input power without damage	15 mW
Spectral Response	InGaAs: 850 - 1700 nm
Output Impedance	50 Ohms
Output Connector	Male BNC
Fiber Optic Connector	Specify FC or ST
Input Numerical Aperture	0.29
Input fiber accommodated	9um Single mode or 50/125 & 62.5/125um multi-mode
Output Offset Voltage	N/A Volts
Noise Level	9.5 pW/ root-Hz at peak responsivity
Maximum Output Voltage	Low gain, 2.0 V pk-pk, High Gain 4 V pk-pk, (Into 50 Ohms)
Power Requirements	Supplied wall-mount universal power supply
Wall-mount Supply Power Requirements	90-260VAC, 50 - 60 Hz, 16 VA Max.
Mains Connectors Supplied	North America, British, Continental Europe, Australian
Dimensions ( mm )	63 L x 30.5 W x 30 H
Weight	(0.16 Kg)
LED Annunciators Provided	Power On
Operating Temperature Range	0 - 40 C
Standard Warranty	Two Years, Component and Workmanship, 30 Satisfaction Guarantee
Accessories Supplied	Transit Case, Universal Power Supply, 9 V ULTRALIFE Lithium Battery, Manual

*TTI reserves the right to change specifications without notice.*



We welcome the challenge of custom applications. Call, fax, or e-mail us with your requirements.



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