

Optical to Electrical Converter

TIA-2000

Features:

- DC to 20 GHz Bandwidth typical, 18 GHz min
- Spectral Response 900 - 1700 nm
- Universal Power Supply
- Two Year Warranty

Applications:

- RF over fibre links
- System Characterization
- 20 GHz digital and analog links
- High speed test and measurement



The TIA-2000 Optical to Electrical Converter is a high speed photodetector module designed for direct optical-to-electrical conversion of RF-modulated optical signals and provides a typical bandwidth of DC-20 GHz. The optical input is supplied through a singlemode 9/125 fiber connector equipped with an ultra-polish FC-PC connector or optionally an angle polished, low reflection FC/APC connector. The RF output of the device is provided through a high performance SMA connector. The typical optical responsivity is 22 V/W at 1550 nm when the unit is terminated with a 50 ohm load.

TIA-2000 Specifications

Detector Type	InGaAs/InP (900 - 1700nm)
Current Responsivity	0.8 A/W @ 1550nm Typical
Maximum Linear Input Power	3mw
Maximum Input Power without Damage	10mw
Bandwidth-(3dB)	DC to 20 GHz Typ, 18 GHz min.
Output Impedance	50 Ohms
Output Connector	Type K SMA Female
Fiber Optic Input Connector	FC/UPC or FC/APC
Input Numerical Aperture	0.11 (9/125 μ Singlemode Optical Fiber)
Optical Return Loss	>35dB, >52dB with APC Connection
Electrical Return Loss	10 dB
Power	Universal Power Supply
Dimensions	1.2"W x 2.5"L x 1.3"H (30.5mm x 63mm x 33mm)
Weight	2.8 oz (0.08 Kg)
LED Annunciators Provided	Power On
Operating Temperature Range	0 - 40 C
Standard Warranty	Two Years, Component and Workmanship, 30 Day Satisfaction Guarantee
Accessories Supplied	Transit/Storage Case, Operating Manual, Universal Power Supply

Typical Setup of the TIA-2000

