

# N7004A Optical-to-Electrical Converter

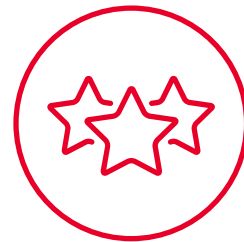
## Fully Integrated 28 Gbps Optical Input Solution for Real-time Oscilloscopes

The N7004A Optical-to-Electrical Converter is designed for direct optical-to-electrical conversion of optical telecom or data com signals into an Infiniium real-time oscilloscope. When used with the Infiniium UXR, V or Z Series 33 GHz or higher oscilloscope, the N7004A allows users to view optical streams at speeds up to 28 Gbps, making this the ideal solution for characterizing or troubleshooting high speed optical signals in the system level testing. The N7004A + Infiniium oscilloscope is also an ideal solution for seeing the unfiltered response of the signal coming out of your optical transmitter.



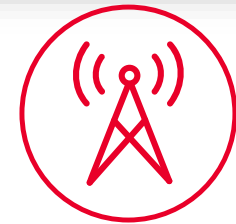
### Fully Integrated O/E

- Measure up to 28 Gbps optical signal input with Infiniium real-time oscilloscopes
- Access the full suite of optical measurements built into the Infiniium baseline software at no additional cost
- Compatible with Infiniium UXR, Z, V, and 90000X/Q Series



### Superior Performance

- DC to 33 GHz
- Single-mode and multimode inputs
- 50/125  $\mu\text{m}$ , 750 nm – 1650 nm (covers main wavelengths of 850 nm, 1310 nm, and 1550 nm)
- Unique S-parameter correction filters result in a flat frequency response, giving you more accurate measurements



### Designed for Your Testing Needs

- Reference receiver testing of industry optical standards
- Characterize the raw response measurement of an optical transmitter

## Key Specifications

- DC to 33 GHz typical (–3 dBe, electrical)
- Single-mode and multimode inputs
- 50/125  $\mu\text{m}$ , 750 nm –1650 nm (covers main wavelengths: 850 nm, 1310 nm, and 1550 nm)
- Max linear input power: 4 mW
- Max non-destructive input power: 8 mW
- Connector type: FC/PC to 50/125  $\mu\text{m}$  fiber, compatible with single-mode or multimode fiber
- Optical measurement features built into the Infiniium oscilloscope baseline software version 05.70 or higher

## Optical Measurement Features

- Optical measurements in watts
- Extinction ratio with dark calibration
- Eye mask
  - Ability to load DCA masks with margin
  - User defined mask support
- Power of level 1 and 0
- Optical modulation amplitude
- Average power
- Full timing analysis
- Full jitter analysis
- GPIB support for all new features

## Ordering Information

### **N7004A 33 GHz Optical-to-Electrical Converter**

*Includes 1x optical-to-electrical converter module, 2x fiber optic FS/FC-A1 connector, 2x FC dust cap and 1x carrying case*

## Oscilloscope Compatibility

Compatible with Infiniium UXR Series, V-Series, Z-Series, 90000 X-Series, and 90000 Q-Series real-time oscilloscopes

For more information, visit [www.keysight.com/find/N7004A](http://www.keysight.com/find/N7004A)