

N7005A 60 GHz Optical to Electrical Converter

Quick Start and Accessories Guide

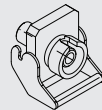
Kit Contents

Extra plastic cap to cover
the FC/PC Input Connector



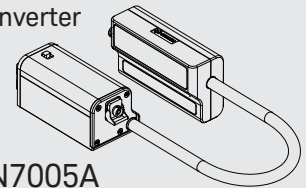
N7740-44101

Extra FC/PC Fiber
Optic Receptacle



1005-0998

Optical to Electrical
Converter



N7005A

- 1 Clean the fiber ends of the N7005A fiber-optic connector as well as the mating fiber-optic patch cable.

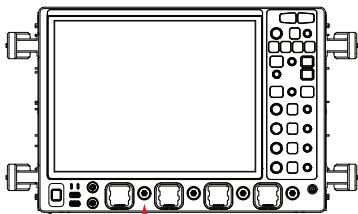
CAUTION

Improper connector care, lack of cleaning, or improper cleaning procedures can damage the N7005A's fiber-optic connector. Therefore, it is critical to clean the N7005A's fiber-end as well as the end of the mating fiber before each and every time contact is made. Repair of the connector damaged due to lack of cleaning or improper use is NOT covered under warranty.

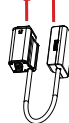
i For details on the cleaning procedure, refer to N7005A User's Guide on www.keysight.com.

- 2 Connect N7005A to a Keysight Infiniium AutoProbe III Oscilloscope.

Refer to the N7005A user's guide for a list of compatible oscilloscopes.

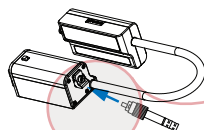


First, connect the N7005A AutoProbe interface module. Use a connector saver.



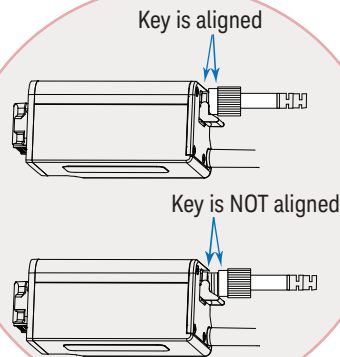
Then, connect the N7005A O/E output module.

- 3 Connect the N7005A FC/PC Input Connector to an FC/PC fiber-optic patch cable.



CAUTION

8mW maximum Power to avoid damage to N7005A



NOTE

Ensure that you use a fiber patch cord with ceramic fiber-optic ferrule.

NOTE

To ensure proper optical signal transmission, the keying features for the input connector and cable must be aligned and finger-tightened.

- 4 Configure the optical measurements setup on the Infiniium software.

- Configure the Wavelength, Bandwidth Limit, and Type of Filter for N7005A.
- Adjust the vertical scale and offset settings of the oscilloscope.
- Select the optical measurement(s).
- Set up the scope channel input for:
 - > Eye diagram and mask testing
 - > Extinction ratio
 - > Optical power of 1 or 0

For PAM4 measurements, configure the measurement setup on the FlexRT software.

- 5 Perform Dark Calibration (optional).

For calibration accuracy, ensure that:

- both ends of the fiber-optic cable are connected.
- the laser source connected to N7005A is turned off.

It is recommended to cover any open optical inputs with a cap to avoid stray light that could impact calibration accuracy.

NOTE

Dark calibration is only valid at a given vertical scale and offset settings of the oscilloscope. A change in these settings requires you to perform the dark calibration again.



Detailed information on N7005A is available at <http://www.keysight.com/find/N7005A>. On this webpage, click the *Document Library* link and download the *N7004A/5A Optical-to-Electrical Converters User's Guide*.

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