

## Features

- -17dBm output power (at 85%)
- Stable output power:  $\pm 0.02$ dB over 12 hours
- Output power is adjustable from zero to 100%
- Internal modulation up to 1kHz
- Sources can be operated independently via the GPIB/IEEE-488 compliant RIFOCS 700R system controller
- Space efficient—up to 11 LED source modules and one system controller can be installed in a 19-inch rack
- Precision Universal Connector Interface (UCI) adapts to all industry standard fiber optic connectors



## Applications

### Fiber Optic Component Testing

The 751R-1300 LED source module provides the precision required to perform a variety of tests and measurements in the 1300nm wavelength region commonly used in multimode fiber optic systems, such as Local Area Networks (LAN), Fiber Distributed Data Interfaces (FDDI), and other short-haul applications.

The output power of the 751R-1300 LED source can be quickly adjusted from zero to 100% using the front panel controls of the 700R controller module, or via the GPIB/IEEE-488 interface incorporated in the latter unit. All RIFOCS LED sources, and other 700 Series modular instruments, may be operated independently on the same I<sup>2</sup>C backplane. The user can toggle between modules and change measurement parameters without affecting the operation of other instruments.

The light output of the 751R-1300 LED source can be toggled between continuous wave (CW) and internal modulation mode either manually or over the GPIB/IEEE-488 interface. The internal modulation frequency can also be adjusted manually or over the GPIB interface using simple commands.

The 751R-1300 LED source incorporates a Universal Connector Interface (UCI), which provides excellent return loss performance and repeatability. UCI adapters are available for all industry standard fiber optic connectors.

## Key Specifications

Wavelength (mean): Nominal Range	1310nm 1270nm to 1345nm
Spectral width (FWHM) <sup>2</sup>	< 150nm
Power stability, 12 hours	$\pm 0.02$ dB
Typical output power <sup>3</sup> into 100/140 $\mu$ m GI MM fiber	-17dBm at 85%
Internal launch fiber	125/140 $\mu$ m SI

<sup>1</sup> The mean wavelength is the geometrical average of all emitted power from the LED.

<sup>2</sup> The FWHM value is the calculated width of the geometrical average.

<sup>3</sup> Measured per FOTP-95.

# 700 Series

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## 751R-1300

## 1300nm LED Source Module

### Ordering Information

One Universal Connector Interface (UCI) adapter is included with the 751R-1300 LED source. Please specify the desired connector adapter type when ordering using the UCI Adapter Table, below. Additional UCI adapters may also be ordered separately.

Part No.	Description
751R-1300	LED source module

### UCI Adapter Table

Adapter Code	Connector Type
AD-234	DIN 47256
AE2-10	Diamond E-2000
APC-10	NTT/FC-PC
AMS-00	Diamond HMS-0 (3.5mm)
AMT-10	Diamond HMS-10A (SMA-2.5)
ASM-90	SMA-905/906
AHP-10	HMS-10/HP (2.5mm)
AML-38	MIL-T-29504/4 and /5
ASC-10	NTT/SC-PC
ATS-16	AT&T/ST-PC

### Specifications

Subject to change without notice

<b>Wavelength (mean)<sup>1</sup>:</b>	
Nominal	1310nm
Range	1270nm to 1345nm
<b>Spectral width (FWHM)<sup>2</sup></b>	< 150nm
<b>Power stability, 12 hrs.</b>	±0.02dB after 15-minute warm-up, from +20°C to +25°C at rated power levels
<b>Internal launch fiber</b>	125/140µm SI
<b>Power output into 100/140 GI fiber<sup>3</sup>:</b>	
Minimum	-17dBm
Typical	+7dBm at 85%
<b>Internal modulation</b>	Continuous wave to 1kHz
<b>Optical connector interface</b>	Universal Connector Interface (UCI)
<b>Environmental:</b>	
Operating temp.	0°C to +50°C
Storage temp.	-15°C to +70°C
Humidity	0 to 95% RH, non-condensing
<b>Weight</b>	310g (10.85 oz.)
<b>Dimensions</b>	12.9 x 3 x 26.2 cm (5 x 1.17 x 10.22 in), one slot in RIFOCS 700 Series rack

<sup>1</sup> The mean wavelength is the geometrical average of all emitted power from the LED.

<sup>2</sup> The FWHM value is the calculated width of the geometrical average.

<sup>3</sup> Measured per FOTP-85.

