



## BENCHTOP INTELLIGENT OPTICAL SIGNAL-TO-NOISE RATIO GENERATOR (OSNR)

### Features

- User selectable optical signal-to-noise ratio and power level
- Built-in tunable filter with adjustable bandwidth
- Stand-alone device with touch-screen control for local operation
- GPIB and Ethernet interfaces for computer control
- Optical port for connecting external optical spectrum analyzer
- Provision for external filter
- Direct output from tunable filter or with EDFA amplification
- Supports 50G/100G/200G/400G applications

### Applications

- Fiber Optic Network Testing
- BER (Bit Error Rate) Testing
- Eye Diagram Quality Testing
- DWDM Network Testing
- Submarine Network Testing

### Product Description

OZ Optics' Intelligent Optical Signal-to-Noise Ratio Generator (iOSNRG) has been designed to allow users to inject a programmable level of noise into an optical signal, creating a precisely defined signal-to-noise ratio. All iOSNRG settings can be controlled automatically with the user-friendly touch panel or computer interface. With a built-in bandwidth adjustable tunable filter, the wavelength can be selected to be any channel within the ITU 50G Grid or any other ITU Grid. The output power level is user programmable, making this an ideal instrument for doing OSNR measurements in data communication systems. The instrument comes with GPIB, USB, and Ethernet interfaces, allowing it to be controlled by a computer, for automated testing of systems or devices.



### Specifications

OSNR Range (dB)	5–38
OSNR Setting Accuracy (dB)	±0.5
Optical Input Power (dBm)	>-10
Optical Output Power (dBm)	+8 (at least)
Wavelength (nm)	1529–1561.5
Channel Spacing (GHz)	50/100/200/400
Fiber core/cladding (µm)	9/125
Electrical Power (W)	80 (max.)
Interface	GPIB, USB, and Ethernet
Voltage (VAC)	110–220
Line Frequency (Hz)	47–63
Mechanical Dimensions <sup>1,2</sup> (L x W x H)	390 mm x 344 mm x 86 mm
Weight (kg)	7.5

<sup>1</sup> Available with 19" 2U rack-mounting hardware.

<sup>2</sup> Available with a carrying handle.

### Part Number

**iOSNRG-1000-TUN-XX-1529/1561.5**

**XX** = Connector code:  
3A for FC/APC  
3U for FC/UPC  
SC for SC/PC  
SCA for SC/APC

