

Features

- Simple, versatile, and user-friendly design
- Rugged, compact, and splashproof aluminum housing
- High output 1.0mW (0dBm) 635nm red laser
- Up to 3km range
- Continuous wave output mode for steady fault illumination
- Blinking output mode increases viewing contrast
- Easy to use “Quick Connect” interface fits all 2.5mm fiber optic connectors
- Ergonomic rotary switch permits easy one-handed operation
- Two AA-size alkaline batteries provide 48 hours of continuous operation
- Optional 16-series Snap-On Connector (SOC) adapters available for secure coupling to FC, ST, SC, and DIN interfaces
- Optional beam collimator eliminates need for connections—ideal for multi-pin receptacles
- Nylon belt holster included

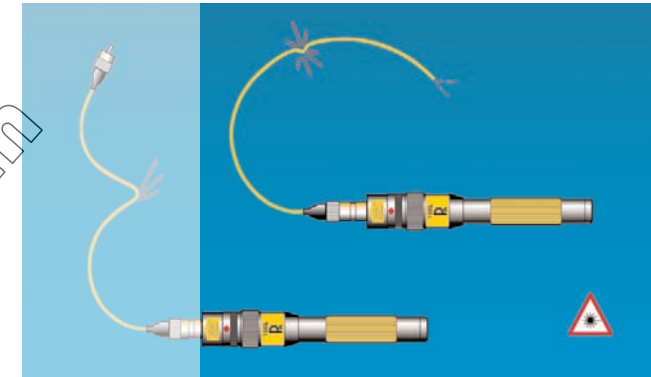


Key Specifications

Nominal wavelength	635nm
Wavelength range	630nm to 640nm
Peak power output into SMF-28 fiber	1.0mW (0dBm) max. 316µW (-5dBm) min.
Spectral width (FWHM)	< 2nm
Connector interface	Universal “Quick Connect” receptacle
CDRH laser class	Class IIIa

Applications

Locating Breaks and Bending Losses



The 160L visual fault finder is an indispensable tool for quickly identifying bending losses and breaks in optical fibers. If a fiber is bent too tightly, red laser light will be seen escaping through the jacket, as shown above, at left. Likewise, if a fiber is broken, escaping light will be visible where the break is located, as shown at right.

Identifying Bad Ceramic Connectors

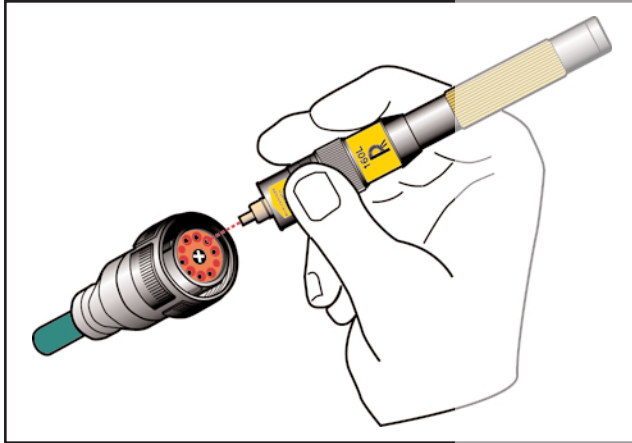


Ceramic connectors are easily tested using the 160L visual fault finder. A fiber broken inside, or past, the ferrule will cause it to glow, as shown above, at left. If the whole connector glows, it is definitely defective.

If the endface polish of the connector is bad, light will be reflected internally, as shown at right. This will also make the ferrule glow when the 160L is used.

Applications (continued)

Multi-Channel Cable Fault Detection



An optional beam collimator (P/N 1601) simplifies fault detection for single- and multi-pin receptacles. The user need only aim the collimated beam into the receptacle to trace faults. This beam collimator is especially useful for tracing faults in multi-channel cables, eliminating the need for a specialized adapter, or disassembly of the connector.

Ordering Information

Part No.	Description
160L	160L visual fault finder, with nylon belt holster
1601	Beam collimator
1620	FC 16-series SOC adapter
1630	ST 16-series SOC adapter
1662	SC 16-series SOC adapter

Specifications¹

Subject to change without notice

Light source type	635nm red laser diode and monitor with multi-quantum well structure
Center wavelength:	
Nominal	635nm
Range (typical)	630nm to 640nm
Spectral width (FWHM)	< 2nm
Typical output power^{2,3}	
Max. into SMF-28 fiber	1.0mW (0dBm)
Min., CW output mode	316µW (-5dBm)
Blink frequency in MOD mode	< 3Hz (approximate)
Power requirements	Two AA-size 1.5V alkaline batteries
Battery life	Approx. 48 hours of continuous operation
Connector interface	Standard "Quick Connect" universal 2.5mm receptacle Optional 16-series Snap-On Connector (SOC) adapters
Environmental:	
Operating temp.	-10°C to +50°C
Storage temp.	-40°C to +60°C
Humidity	0 to 95% RH, non-condensing
Dimensions	Length: 22.9 cm (9.0 in.) Diameter: 2.54 cm (1 in.)
Weight	200g (7 oz) with batteries and nylon belt holster
CDRH laser class	Class IIIa
CE	IEC 801-2 portion of the EN50082-1 ESD immunity requirement

¹ Within specified ambient environment of +20°C to +25°C.

² APC-type ferrule coupling efficiency reduced > -3dBm.

³ Output power with optional beam collimator may exceed 1mW.

Product complies with CDRH Class II, 1mW max., without beam collimator accessory, and IEC 825-1: 1993, 5mW max.

