

Specifications

Fiber Optic Test Set

NOTE: These devices are class 1 laser products. They meet the safety regulations of IEC-60825, FDA 21 CFR 1040.10, and FDA 21 CFR 1040.11.

Optical specifications — FLS 101 fiber optic output

Number/type	
Singlemode	1 laser emitter
Multimode.....	1 LED emitter
Connectors	2 connectors with LC adapters
Wavelengths	
Singlemode	1310 nm \pm 20 nm, 1550 nm \pm 20 nm
Multimode.....	850 nm \pm 30 nm, 1310 nm -10/+50 nm
Spectral width	
Singlemode	5 nm (max.) at 1310 nm and at 1550 nm
Multimode.....	40 nm (typical) at 850 nm 120 nm (typical) at 1310 nm
Transmission power	
Singlemode	0 dBm, 9 μ m
Multimode.....	-20 dBm, 62.5 μ m

NOTE: Power will be 3 dB lower if a 50 μ m mandrel-wrapped jumper is used instead of a 62.5 μ m mandrel-wrapped jumper.

Stability	
Singlemode	\pm 0.05 dB over 1 hour after 15 minute warmup \pm 0.1 dB over 8 hours after 15 minute warmup
Multimode.....	\pm 0.1 dB over 8 hours after 5 minute warmup

Optical specifications— FPM 101

Wavelengths	850 nm, 1300 nm, 1310 nm, 1490 nm, 1550 nm; calibrated
Detector type	Germanium (Ge)
Units of measurement	dB, dBm, μ W
Testing ranges	
Measurement	-60 to +6 dBm
Tone detection.....	At 850 nm: -45 to +6 dBm At all other wavelengths: -50 to +6 dBm
Wavelength identification	At 850 nm: -45 to +6 dBm At all other wavelengths: -50 to +6 dBm
Resolution	0.01 dB
Accuracy	\pm 0.25 dB at -10 dBm

General

Power

FLS 101	Internal batteries or External, supplied by optional AC adapter Input: 100-240 VAC, 50-60 Hz Output: 9 VDC, 1.5 A, 13 watts
FPM 101	Internal batteries or External Supplied via USB port

Power consumption

FLS 101	LED transmission: 1.8 watts, 3 VDC Laser transmission: 1.5 watts, 3 VDC
FPM 101	2.7 watts, 3 VDC with backlight on

Batteries

Number/type	2 AA batteries (1.5 V alkaline or 1.2 V rechargeable)
Operating time (nominal)	
FLS 101	Multimode operation: 20 hours Singlemode operation: 72 hours
FPM 101	300 hours

Temperature/humidity	Storage: -22 to +140 °F (-30 to +60 °C) / 10% to 90%, noncondensing Operating: +14 to +122 °F (-10 to +50 °C) / 10% to 90%, noncondensing
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Cooling	Convection, no vents
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Thermal dissipation	1.1 BTU/hr
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Mounting	No
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Enclosure type	Plastic
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Enclosure dimensions	4.5" H x 2.6" W x 1.0" D (11.5 cm H x 6.7 cm W x 2.5 cm D) (Excluding the rubber boot, connectors.) 5.5" H x 3.6" W x 1.5" D (14.0 cm H x 9.1 cm W x 3.8 cm D) (Including including rubber boot and connectors.)
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Product weight

FLS 101	0.7 lb (0.3 kg)
FPM 101	0.6 lb (0.3 kg)

Shipping weight	2 lbs (1 kg)
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Vibration	ISTA 1A in carton (International Safe Transit Association)
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Regulatory compliance

Safety	EN 61010-1
EMI/EMC	EN 61000-4, EN 61326-1

Warranty	3 years parts and labor, excluding batteries
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NOTE: All nominal levels are at $\pm 10\%$.

NOTE: Specifications are subject to change without notice.

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