

Return Loss Tester—OT-6300

Return Loss Testing

The OT-6300 return loss tester is designed to measure return loss of single-mode fiber optical passive components, such as attenuators, splitters, switches as well as optical components (fiber cable and patch cords etc). The OT-6300 is an instrument combining optical laser light source, optical power meter, and return loss measurement modules all in one. It measures return loss of a DUT at 1310 nm and 1550 nm in seconds. Values of return loss as high as 65 dB can be measured with an accuracy of better than ± 0.5 dB.

In addition to its optical measuring capabilities, it can also be use as a stabilized optical light source, calibrated power meter and insertion loss tester. With a built-in light source, OT-6300 is also designed for testing bi-directional optical power attenuation. With its ergonomic exterior and backlight LCD design, it is ideal for field installation and maintenance in LAN/WAN, FDDI, Telecom, and CATV applications.

Main Features

- Dual wavelength available
- Reliable , stable and easy to operate
- High measurement range to 65 dB
- High accuracy
- Ergonomic, eye-catching handheld package.
- Backlight LCD display



Applications

- Optical Return Loss Measurement
- Optical Power Measurement
- Stabilized Laser Light Source
- Optical Insertion Loss Measurement
- Optical Fiber Attenuation Measurement

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Specifications

Detector element	InGaAs
Fiber type	Standard single mode 9/125 μm (Corning SMF-28)
Wavelength	1310 \pm 15 nm / 1550 \pm 15 nm
Measurement range	65 dB
Optical power output	- 5 \pm 2 dBm
Optical stability	\pm 0.01 dB (1 hr) / \pm 0.05 dB (4 hr)

Optical Power Measurement Mode

Detector element	InGaAs
Fiber type	9/125 μm (Corning SMF-28)
Wavelength	1300 nm, 1310 nm and 1550 nm
Measurement range	+3 ~ - 70 dBm
Linearity	\pm 0.1 dB @ + 3 dBm ~ - 50 dBm \pm 0.5 dB @ - 60 dBm \pm 1.5 dB @ - 70 dBm
Resolution	0.01 dB
Uncertainty (2σ)	\pm 0.2 dB (or \pm 5%) @ -20 dBm
Test port	FC/APC

Dimensions	196 (L) x 100 (W) x 40 (H) mm
Weight	900 g
Temperature	Operating: -0 to +40°C Storage: -10 to +60°C
Humidity	0 ~ 85% RH (Non-condensing)
Battery Power	12 hours – Continues power meter usage 8 hours – Continues Light source on 6 hours – Battery fully charged time

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