*fiber*TOOLS ™

557B
3 x 3.5mm Si Optical Power Meter

Features

■ 635nm, 780nm, and 850nm N.I.S.T. traceable calibration wavelengths

■ +3 to -60dBm measurement range

■ Easy to use—three buttons control all functions

■ Multi-function display summarizes all measurement data

■ 0.01dB measurement resolution

■ Relative logarithmic dB and absolute logarithmic dBm units

■ Multi-wavelength reference storage—stores and recalls reference power levels for faster, more efficient measurements

■ Snap-On Connector (SOC) interface adapts to all industry standard fiber optic connectors and other less common types

■ Long battery life—more than 100 hours of continuous operation

■ User-selectable auto-shutoff

■ AC power converter and adapter available for prolonged or benchtop use

■ Splashproof

Key Specifications

Detector type	3 x 3.5mm Si
Calibration wavelengths	635, 780, and 850nm
Calibration traceability	U.S. N.I.S.T.
Power range	+3 to -60dBm
Absolute accuracy	±0.25dB
Resolution	±0.01dB
Polarization dependence	< 0.1dB

Applications

Insertion Loss and Link Loss Testing

The 557B 3 x 3.5mm Si optical power meter is a general purpose instrument suitable for conducting fiber optic measurements on systems and networks based on single-mode, multimode, plastic, and large core glass optical fibers. The 635, 780, and 850nm calibration wavelengths are optimized for fiber optic systems incorporating near-infrared and visible light sources.

Paired with a RIFOCS 250 Series LED source or 260 Series laser source, the 557B optical power meter is ideal for insertion loss testing of fiber optic cables and connectors. The 557B optical power meter can also be used for link loss testing of installed cable plants.

Output Power Measurements

Three calibration wavelengths, a large area Si photodetector, and a wide dynamic range make the 557B optical power meter ideal for measuring the output of near-infrared and visible light sources, and other devices.

In addition, a broad range of Snap-On Connector adapters for both industry standard fiber optic connectors, and many less common types, makes the 557B an indispensable tool for the local area network technician, and others working with short-wavelength fiber optic systems.

Ordering Information

One Snap-On Connector (SOC) adapter is included with the 557B optical power meter. Please specify the desired connector adapter type when ordering using the SOC Adapter Table, below. Additional SOC adapters may also be ordered separately.

Part No.	Description
557B	557B optical power meter
90AC	AC power converter

SOC Adapter Table

Part No.	Description
1001	Blank
1010	DIN 47256
1020	NTT/FC-PC
1030	AT&T/ST-PC
1038	MIL-T-29504 optical termini
1040	HMS-10 (2.5mm)
1047	Mini-BNC
1050	Diamond HMS-0 (3.5mm)
1057	Stratos 430/Holtek 38000
1062	NTT/SC-PC
1081	Radiall VFO
1086	Diamond HMS-10A (SMA-2.5)
1087	SMA-905/906
10E0	Radiall EC
10E2	Diamond E-2000
10TB	Simplex TOSLINK/Spectran J-pin
10TD	TR/TX set, duplex TOSLINK/Spectran J-pin
10TR	Duplex TOSLINK TX
10TX	Duplex TOSLINK TR
10ZP	H-P Versalink/Spectran V/Z-pin

Specifications[1] *Subject to change without notice*

Detector type	3 x 3.5mm silicon (Si)
Calibration wavelengths	635nm, 780nm, and 850nm
Power range	+3 to -60dBm
Linearity:	
±0.5dB	+3dBm to -3dBm
±0.05dB	-3dBm to -50dBm
±0.5dB	-50dBm to -60dBm
Absolute accuracy	±0.25dB at calibration conditions
Wavelength dependence:	
600 to 660nm	0.30dB
820 to 880nm	0.25dB
975 to 985nm	0.15dB
Resolution	±0.01dB
Power requirements	Two AA-size 1.5V alkaline batteries provide approx. 100 hours of continuous operation
Connector interface	Snap-On Connector (SOC) interface
Environmental:	
Operating temp.	-15°C to +55°C
Storage temp.	-35°C to +70°C
Humidity	0 to 95% RH, non-condensing
Dimensions	7.2 x 14.2 x 3.5 cm (2.8 x 5.6 x 1.4 in.)
Weight	250g (8.9 oz)

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