Advanced Test Equipment Rentals www.atecorp.com 800-404-ATEC (2832)

Operating and Programming Manual

HP 81553SM Lightwave Multimeter Source Module

SERIAL NUMBERS

This manual applies to all instruments.



HP Part No. 81553-90011 Printed in Germany

> Second Edition E0796

HP 81553SM Specifications

Specifications describe the instrument's warranted preformance. Supplementary performance characteristics describe the instrument's non-warranted typical performance.

Because of the modular nature of the instrument, these performance specifications apply only to this module. You should insert these pages into the appropriate section of the manual.

Table C-1. HP 81553SM Specifications

Туре	FP-Laser
Central Wavelength ^[1]	1550nm±20nm
Fiber Type	single mode $9/125\mu\mathrm{m}$
Spectral Bandwidth (RMS) ^[2]	<4nm rms
Output Power ^[3]	>0dBm
CW-Stability ^[4]	
Short Term (15min, T=Constant)	$\pm 0.003 dB$
Long Term (6h, $T=0$ to $55^{\circ}C\pm 1K$)	$\pm 0.03 dB$
Operating Tempreature	0°C to +55°C
Dimensions	75mm H, 32mm W, 335mm D
	$(2.8" \times 1.3" \times 13.2" \times)$
Weight	net 0.7kg (1.5lbs), shipping 1kg (2.2lbs)
Recalibration Period	1 year

^[1] Central Wavelength is shown on the display.

^[2] rms: root mean square,

^[3] Class 3A according to IEC 825-1 (1993), Class 1 according to FDA CFR 21 (1986)

^[4] After a warm-up time of 60 min. with output enabled. If previously stored at the same temperature, 20 min. only.

Supplementary Performance Characteristics

Internal Digital Modulation

You can select internal modulation frequencies of 270HZ, 1kHz, or 2kHz. All outputs are pulse shaped, with a duty cycle of 50%.

Output Attenuation

The output can be attenuated from 0 to 6dB, in steps of 0.1dB.

Stability

The value of the long term CW-stability doubles with just one minute warmup time (source enabled).