

HP 81533B Specifications

	HP 81533B with HP 81520A Optical Head	HP 81533B with HP 81521B Optical Head	HP 81533B with HP 81524A Optical Head	HP 81533B with HP 81525A Optical Head
Sensor Element	Si, 5mm	Ge, 5mm	InGaAs, 5mm	
Wavelength range	450-1020nm	900-1700nm	800-1650nm	
Power range	+ 10 to -100dBm	+ 3 to -80dBm	+ 3 to -90dBm	+ 27 to -70dBm (1250 to 1650nm) + 23 to -70dBm (800 to 1650nm)
Applicable fiber type	parallel beam, 9/125μm - 100/140μm, NA ≤0.3			
Uncertainty (Accuracy) at reference conditions ^[1]	±2.2% (600-1020nm)	±2.2% (1000-1650nm)	±2.2% (1000-1600nm)	±3% (900-1600nm)
Total Uncertainty ^[2]	±4%±0.5pW (600-1020nm)	±4%±50pW (1000-1650nm)	±4%±5pW (1000-1600nm)	±5%±500pW (900-1600nm)
Linearity 18°C to 28°C const. temp	(+ 3 to -80dBm) ±0.04dB±0.5pW	(+ 3 to -60dBm) ±0.04dB±50pW	(+ 3 to -70dBm) ±0.04dB±5pW	(-10 to -50dBm) ^[3] ±0.04dB±500pW
Operating temp. range const. temp	±0.15dB±0.5pW	±0.15dB±50pW	±0.15dB±5pW	±0.15dB±500pW
Noise peak-peak, avg. time 1sec	<0.5pW (700-900nm)	<50pW (1200-1600nm)	<5pW (1000-1600nm)	<500pW (900-1600nm)
Operating Temperature	0°C to +40°C	0°C to +40°C	0°C to +40°C	0°C to +35°C ^[4]
Dimensions				
Module	75mm H, 32mm W, 335mm D (2.8"×1.3"×13.2")			
Head	37.5mm Diameter, 140mm Long (1.5"×5.5")			
Weight				
Module	net 0.6kg (1.3lbs), shipping 1kg (2.2lbs)			
Head	net 0.45kg (1lbs), shipping 1kg (2.2lbs)			
Recalibration period	2 years			
Warmup time	20 min.			
The display may vary by ±1 count.				

Information on the traceability of power meters is available on request

[1] at the following reference conditions:

- Power level 10 μ W (-20dBm), Continuous Wave (CW).
- Parallel beam, 3mm spot diameter on detector.
- Ambient temperature 23 \pm 5°C.
- At day of calibration.
(add 0.3% for aging over one year, add 0.6% over two years).
- Spectral width of source <10nm

[2] at the following operating conditions:

C-2 HP 81533B, HP 81520A, HP 81521B, HP 81524A, and HP 81525A Specifications