





Optical Measuring Instruments and Optical Device Test Systems

High-Accuracy, High-Sensitivity and High-Speed Optical Power Meter

Q8221

										
Q82227		Q82232		Q82233		Q82208		Model		
Long Wavelength High-Sensitivity High-Power		Long Wavelength High-Sensitivity Low Polarization				Long Wavelength High-Sensitivity		Product Type		
		900 to 1650 nm				800 to 1700 nm		Wavelength Range		
-80 to +27 dBm		-94 to +10 dBm						Power Range		
CW	CHOP	CW	CHOP	CW	CHOP	CW	CHOP	Range*2		
2000 mW	2000 mW	20 mW	20 mW	20 mW	20 mW	20 mW	20 mW	Max.		
20 nW	2000 nW	200 pW	200 nW	200 pW	200 nW	200 pW	200 nW	Min.		
In GaAs								Sensor Element		
Cooled										
Not Possible								Beam		
Core Diameter ≤10 μm, NA ≤0.19 PC, APC, and Slanted Rubbed Connectors		Core Diameter ≤10 μm, NA ≤0.19 PC Rubbed Connector				Core Diameter ≤62.5mm, NA ≤0.21 PC APC, and Slanted Rubbed Connectors		Fiber		Optical Input Form
CW	CHOP	CW	CHOP	CW	CHOP	CW	CHOP	Measurement Accuracy*2		
±2.5%	±3.5%	±2.5%	±3.5%	±7.5%	±8.5%	±2.5%	±3.5%	At Calibration Wavelength		
		1550 nm 1 mW 0 to 40°C								
		950 to 1600 nm 1 mW 0 to 40°C								
		1300 nm 1 mW 0 to 40°C								
CW	CHOP	CW	CHOP	CW	CHOP	CW	CHOP	At Wide Wavelength range		
±4.5%	±5.5%	±4.5%	±5.5%	±14.5%	±15.5%	±4.5%	±5.5%			
±0.5% ±10 pW -58 to +27 dBm 0 to 40°C		±0.5% ±0.4 pW -72 to +10 dBm 0 to 40°C						Linearity (At Average Time : 1 sec.)		
±1.0%±10 pW -61 to +27 dBm 0 to 40°C		±1.0%±0.4 pW -75 to +10 dBm 0 to 40°C								
-80 dBm		-94 dBm						At Averaging Time : 1 sec.		
								Noise Level*3		
								Without Averaging*4		
								SLOW(approx. 9/sec.)		
								FS-1 (approx. 30/sec.)		
								FS-2 (approx. 50/sec.)		
								FS-3 (approx. 100/sec.)		
0.05 dBp-p or less		0.003 dBp-p or less		0.005 dBp-p or less		0.02 dBp-p or less (Typical 0.015 dBp-p)		Polarization Dependence (at wavelength 1550 nm)		
60 dB or more		—				50 dB or more		With APC, or slanted Rubbed Connector		
45 dB or more (Typical 47 dB)		—				43 dB or more (Typical 45 dB)		With high return loss adaptor*6		
approx. 14 dB		45 dB or more*5				approx. 14 dB		With PC rubbed connector		
Approx. 60 (W) × 43 (H) × 135 (D) mm 500 g or less		Approx. 60 (W) × 43 (H) × 135(D) mm 590 g or less		Approx. 60 (W) × 43 (H) × 166 (D) mm 660 g or less		Plugs into Q8221		Dimensions and Mass		
A08340 (Standard Accessory)				A08161(Standard Accessory)				FC		Connectors
A08338				A08162				SC		to Adaptor
A08339				A08163				ST		Corre- spondence
A08371				A08370				MU		List
—				Jack-type Possible				Plug-in		
—				—				MT Adaptor (Mating to 12-pin SMF)		
A08328		Usage of high return loss adaptors are not possible				A08328		FC		High return
A08329		Usage of high return loss adaptors are not possible				A08329		SC		loss adaptor
A08330		Usage of high return loss adaptors are not possible				A08330		ST		Corre- spondence List*9
A08331		Usage of high return loss adaptors are not possible				A08331		Plug-in		
Q82203 Required						Q82202 or Q82203 Not Required		Connection to the Q8221 Main Unit		
Connection Cable Available as Accessory with Q82203										

*2 Calibrations of Q82215, Q82216 and Q82208 are also available as options (OPT82215+25, OPT82216+25, OPT82208+25). Measurement accuracy Value for the option sensors are the same as in the chart above at 1550 nm calibration wavelength.

*3 When master grade A dispersion shift fiber is used.

*4 Connection loss with single mode fiber is 0.07 dB (typical).