

Performance Parameters

Wavelength

Measurement range:	600 to 1700 nm
Accuracy:	≤±500 pm
Accuracy*1:	≤±20 pm (after calibration with built-in light source, option 25, 1530 to 1570 nm)
	≤±40 pm (after calibration with built-in light source, option 25, 1570 to 1610 nm)
	≤±200 pm (using built-in or ext. single point calibration light source, 600 to 1700nm)
Linearity*1:	≤±10 pm (1530 to 1570 nm)
	≤±20 pm (1570 to 1610 nm)
Repeatability*1, *4:	≤±3 pm (1530 to 1610 nm)

Wavelength resolution

Settings:	10 pm, 20 pm, 50 pm, 100 pm, 200 pm, 500 pm
Accuracy*1, *6:	≤±3% (Res. 50 pm, 1530 to 1610 nm)
	≤±2% (Res. 100 pm or more, 1530 to 1610 nm)

Level

Measurement range*2, *3:	-87 to +23 dBm (1250 to 1610 nm) -77 to +23 dBm (950 to 1250, 1610 to 1700 nm)
	-55 to +23 dBm (600 to 1000 nm)
Accuracy*1, *3:	≤±0.4 dB (1550 nm)
Linearity*1:	≤±0.05 dB (-50 to -10 dBm, 1550 nm)
Scale:	Logarithmic 0.1, 0.2, 0.5, 1, 2, 5, 10 dB/DIV plus others user selectable, and Linear
Repeatability*1, *3, *4:	≤±0.02 dB (1530 to 1610 nm)
Flatness*1:	≤±0.2 dB (1530 to 1610 nm)
Polarization dependency*1, *3:	≤±0.05 dB (1250 to 1610 nm)
Dynamic range*1, *5:	≥50 dB (±0.1 nm from peak wavelength) ≥60 dB (±0.2 nm from peak wavelength) ≥67 dB (±0.4 nm from peak wavelength, High Dynamic Range Mode)

Sweep

Span:	0.2 nm from full span or zero span
Number of samples:	101, 201, 501, 1001, 2001, 5001, 10001
Measurement time:	≤500 ms (Span 10 nm, Normal Mode, 1550 nm, average 1 time, 501 samples)

Pulse Light Measurement

Peak holding mode:	Waiting time is set every one measurement point (Gate Time 1 ms to 1 S) and the peak level during this waiting time is displayed Minimum optical pulse width 10 nSec (30 μSec or longer recommended) Optical pulse frequency; 1 Hz or more
External synchronization:	The timing can be controlled by a SYNC signal at the external input. SYNC signal input level; TTL (High; 3.5 V, Low; 1.5 V) Pulse width; 10 ns or more
SyncLo Mode:	Minimum light pulse width measurement during SYNC high level is 10 ns (30 μs or longer recommended)
SyncHi Mode:	Sample timing from the rising or falling edge of the SYNC signal is set (0 to 1000 μs)

*1) At 23°C ±5°C

*2) At 10 to 30°C

*3) At least 100 pm resolution

*4) At 1 min. repetition rate

*5) At 1523 nm wavelength, resolution 10 pm

*6) Correction by effective bandwidth

Features

Memory feature	
Internal RAM:	Measurement data; at least 15 screens (501 samples) (battery backup)
Internal floppy DISK:	3.5 inch 2 HD 1.44 M, MS-DOS format
Display:	Wavelength/Frequency display on the horizontal axis, dual upper/lower display, superimpose display, cursor measurements, multi-trace display (up to 32 traces)
Operations/Analysis:	Auto peak search, Auto peak center, Auto reference level, Spectrum width analysis (Threshold, Envelope, RMS, Peak RMS, X nm level), Notch width analysis (X dB width, X nm level), Optical amplifier Noise Figure analysis function (up to 256 wavelengths), WDM signal analysis function (up to 256 wavelengths, level, SNR, ITU-T grid), Normalize with zoom function (LOSS/TRANS), WDM monitor function, limit line function, Peak power monitor function (with trend chart)
Others:	Wave length correction (built-in or external light source), wavelength/level offset correction, Label feature

Optical input

Internal adapting fiber:	9.5/125 μm SM fiber (master grade-A connector recommended)
Reflective attenuation:	≥35 dB
Connector	
(user replaceable):	FC (Std.), ST, SC (accessories sold separately)

Data Input/Output

GPIB:	IEEE488-1978
Printer:	Internal thermal printer
Printer interface:	D-SUB 25 pin ESC/P, ESC/P-R, PCL
Video output:	VGA (15 pins, female)
LabView and LabWindows driver available on request	

Options OPT8384+25

Light Source for wavelength calibration with EE-LED and acetylene cell output:	Output level*1; ≥-45 dBm/nm (1550 nm)
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Environmental Specifications

Operating temperature:	+10 to +40°C, Relative humidity 85% or less (non-condensing)
Storage temperature:	-10 to +50°C, Relative humidity 90% or less (non-condensing)
Power Supply:	AC100-120 V/220-240 V, 50/60 Hz, 200 VA or less
Dimensions:	Approx. 424 (W) x 221 (H) x 500 (D) mm
Mass:	29kg or less

Accessories

FC connector adaptor (standard accessory):	A08161
SC connector adaptor:	A08162
ST connector adaptor:	A08163
Optical fiber cable (SM 9.5/125 µm 2m, with FC-SPC, master grade-A connectors) :	A01291

*Please be sure to read the product manual thoroughly before using the products.
Specifications may change without notification.*