AQ4320A/4320B/4320D Tunable Laser Source

■ The ideal Tunable Laser Source for evaluation of D-WDM systems and components

AQ4320A

Introduction

The AQ4320 high-quality Tunable Laser Source can accurately set wavelength range, accommodating various aspects of D-WDM use.
High output, high SMSR, and other specifications are excellent for evaluating optical fiber amplifiers and components, D-WDM systems, etc.

Features

- Wavelength range: 1480 to 1580nm (AQ4320A)
- Continuous sweep
- High optical output with +10dBm (typ.) (AQ4320A)
- Side mode suppression ratio: 70dB (AQ4320B)
- High optical output at 1600nm band (AQ4320D)
- Wavelength calibration function with built-in wavelength standard

Specifications

Model		AQ4320A	AQ4320B	AQ4320D
Wavelength range		1480 to 1580nm	1500 to 1580nm	1520 to 1620nm
Wavelength set resolution		0.001nm		
Absolute wavelength accuracy		±0.1nm		
Relative wavelength accuracy		±0.035nm (typ.)		
Wavelength stability		±100MHz/h (±0.8pm/h) (typ.)		
Spectral width [1]	Narrow	1MHz or less		
		200kHz (typ.)		
	Wide	200MHz or more		
SMSR [1, 2]		50dB or more/60dB (typ.)	70dB or more/80dB (typ.)	50dB or more
Optical output level [1]	Peak	–	–	+7dBm (typ.)
	1560 to 1600nm	–	–	+6dBm or more
	1550nm	+8dBm or more	-3dBm or more	–
		+10dBm (typ.)		
	1540 to 1620nm	–	–	+5dBm or more
	1520 to 1620nm	–	–	+3dBm or more
	1520 to 1570nm	+7dBm or more	-6dBm or more	–
	1500 to 1580nm	+5dBm or more	-10dBm or more	–
	1480 to 1580nm	+3dBm or more	–	–
Settable optical output range [1]		20dB or more (0.1dB steps)		
Optical output stability [1]	5 min [3]	±0.01dB or less		
	1 h [4]	±0.05dB or less		
	8 h [5]	±0.3dB or less		
Optical output accuracy [1]		±1dB or less		
Optical output reproducibility [1, 6]		±0.04dB		
Optical output level flatness [1, 7]		±0.1dB		
RIN		-145dB/Hz (typ.)		
Internal modulation (CHOP)	Set frequency	0.2 to 300kHz		
	Set resolution	10Hz, 100Hz, 1kHz, 10kHz, 100kHz		
External modulation (CHOP)	Set frequency	0.2 to 300kHz		
	Set resolution	–		
Direct modulation	Modulation frequency	100kHz to 300MHz		
	Modulation rate	5% or less		
	Modulation input level	0dBm or less		
Wavelength sweep speed		100nm/sec (Max.)		
Applicable optical fiber		SMF (10/125μm)		
Applicable connector [8]		FC/PC, optical return loss: 50dB or more		
Environmental conditions		Operation temperature: +10 to +35°C, storage temperature: -10 to +50°C		
Power requirements		AC100 to 120V, 200 to 240V, 50/60Hz, Approx. 150VA		
Dimensions and mass		Approx. 425 (W) x 177 (H) x 450 (D) mm, approx. 20kg		
Accessories		Instruction manual: 1, power cord: 1, FD: 2, AQ9441 (FC) connector adapter, 50Ω terminal		

Notes
1) CW light, at the output point of 2m-long optical fiber
2) Optical output = (maximum optical output-3)dB 3) Constant temperature: 25°C
4) Within ±1°C in the range of 10 to 35°C 5) 10 to 35°C 6) Optical output level fixed.
7) Optical output = (maximum optical output-3)dB, at wavelength range of 1500 to 1580nm (AQ4320A/B), and at wavelength range of 1540 to 1600nm (AQ4320D)
8) For optical connectors other than FC/PC type, please consult us.
9) The above specifications become effective only when the unit is set for wavelength calibration operation after running the power on and leaving the unit in standby mode for 30 minutes.

Options

AQ9441 (SC) connector adapter
AQ9441 (ST) connector adapter