

Frequad-HP (FQ50-20 / FQ50-10 / FQ50-07)**Optical Specifications**

Item	Specification	Remarks
Output Power	2.0 W / 1.0 W / 0.7 W	FQ50-20 / FQ50-10 / FQ50-07
Power Stability	±1 %	8 hours period with APC mode
Laser Noise	±1.5 %	10 Hz to 100 MHz
Wavelength	266.043±0.04 nm	
Wavelength Stability	<±0.05 pm/h	<±1 °C
Linewidth	<0.005 pm	
Extinction Ratio	>100:1	
Polarization	Vertical	±3°
M ²	<1.2	
Beam Diameter	3.0±0.3 mm	
Beam Roundness	>85 %	
Beam Waist Position	±25 % of Rayleigh Range	
Astigmatic Difference	<15 % of Rayleigh Range	
Beam Divergence	<0.2 mrad	1/e ²
Transverse Mode	TEM00	
Pointing Stability	±10 μrad	
	<100 μrad/°C	
Warming Up Time	<2 hours	

General Specifications

Item	Specification	Remarks
Operating Temperature	Center Temperature: 23 °C to 25 °C	
	Variation: Center Temp. ±2 °C	
Temperature Fluctuation Tolerance	<1.5 °C/hour	
Operating Humidity	20 % to 70 %	
Operating Altitude	0 to 2000 m	
Shipping Temperature	-15 °C to 50 °C	<Δ10 °C/hour
Shipping Humidity	<90 %	
Cleanliness	<Class 1,000	
Purge Air	Clean Dry Air, 0.4 to 0.8 NI/min	
Allowed External Vibration	49.0 Gal (0.05G)	5 to 150Hz
Cooling	Water cooling / Air cooling	FQ50-20 / FQ50-10 and FQ50-07
Minimum Bending Radius of Fiber Cable	<100 mm	

Power Supply Specifications

Item	Specification	Remarks
AC Input Voltage	100 to 240 VAC	Rated
	85 to 265 VAC	Allowed range
AC Frequency	50/60 Hz	Rated
	47 to 63 Hz	Allowed range
Power Consumption	<300 W	

Dimensions

Item	Dimension	Weight
Control Unit	424(W) x 460(D) x 104(H) mm	12 kg
Fiber Laser Unit	424(W) x 460(D) x 236(H) mm	30 kg
Laser Head Unit	240(W) x 840(D) x 160(H) mm	35 kg