



連續式固態雷射 Continuous Solid-State Laser



單頻紫外光雷射

Quasi - Continuous Wave (CW) UV Laser - Xcyte Series

Key Features

- 355 nm outputs available
- Quasi-CW UV output
- Field-proven Direct-Coupled Pump (DCP®)
- TEM₀₀ mode quality
- Light-regulated output power level
- RS232-controllable
- Solid-state design
- Rugged industrial platform
- Compact

Laser Head Specifications*1

Parameter	CY-SM20	CY-SM60	CY-SM100	CY-SM150
Wavelength	355 nm			
Spectral purity	>99%			
Repetition rate	100±10 MHz			
Pulse width,IR	>10 ps			
Average output power *2	Initial *3 20±2 mW	60±6 mW	100±10 mW	150±15 mW
	Lifetime 20±4 mW	60±12 mW	100±20 mW	150±30 mW
Power stability,over 8 hours *4	< ±1%			
Amplitude noise,10 Hz to 1 MHz *5	<1% rms			
Waist diameter *6	0.9±0.2 mm			
Waist asymmetry	<15%			
Pointing stability *7	<20 µrad/°C			
Beam quality	M ² <1.2 (3σ)			
Beam pointing, relative to bezel normal	<±8 mrad			
Polarization	>100:1, horizontal			
Warm-up time	From cold start <30 minutes			
	From standby <15 minutes			
Dimension (W x H x L)	5.75 x 7.4 x 16.5 inches (14.5 x 18.7 x 41.9 cm)			
Weight	24 lbs (10.88 kg)			

*1. Specification level includes manufacturing variability, laser operational variability, and measurement uncertainty. Unless otherwise noted, specifications are given at the 3σ level.

*2. Averaged over 1 minute; measured after >1 hour run time from start. Power level is fixed. Assumes steady-state temperature within the operating ambient temperature range.

*3. Applies to the first 500 hours of operation.

*4. Averaged over 10 seconds with 1 second sample interval; measured after >1 hour run time from start. Assumes steady-state temperature within the operating ambient temperature range.

*5. rms value, 3σ does not apply.

*6. Refers to the radial beam parameters.

*7. Measure after >1 hour run time from start. Measured value is peak to peak excursion divided by total temperature excursion of operating temperature range, for temperature rate of change <1 °C/minute. Applies to 20 / 60 / 100 mW only.



Applications

- Flow cytometry
- Microstereolithography
- Semiconductor wafer inspection