

Stabilized Violet-blue 375 nm 405 nm 444 nm lasers

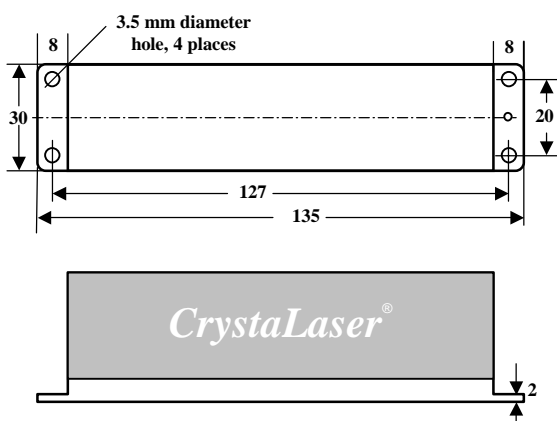
High reliability High stability Single longitudinal mode Circular beam

SPECIFICATIONS

Wavelength	Low noise version, Model No.		SLM version, Model No.			
405 ± 4 nm 200mW – 1W, 405 nm, 444 nm lasers listed on the bottom of the table	BCL-100-405 100 mW	BCL-010-405 10 mW	BCL-040-405-S 40 mW	BCL-010-405-S 10 mW	BCL-030-405-S 30 mW	BCL-005-405-S 5 mW
	BCL-050-405 50 mW	BCL-005-405 5 mW	BCL-020-405-S 20 mW			
	BCL-020-405 20 mW					
444 ± 4 nm	BCL-040-440 40 mW	BCL-010-440 10 mW	BCL-030-440-S 30 mW	BCL-010-440-S 10 mW	BCL-020-440-S 20 mW	BCL-005-440-S 5 mW
	BCL-020-440 20 mW	BCL-005-440 5 mW				
375 ± 4 nm	BCL-016-375 16 mW	BCL-005-375 5 mW	BCL-010-375-S 10 mW	BCL-005-375-S 5 mW		
	BCL-010-375 10 mW					
Longitudinal mode	Multiple		Single			
Spectrum linewidth	1 nm, typical		< 0.0001 nm			
Coherence length	< 0.3 mm		> 50 meters			
Output noise (rms, 10Hz-50MHz)	< 0.5 %		< 0.5 %			
Output stability (rms)	1% over 24 hours		2% over 24 hours			
Modulation options	TTL 50kHz, 20MHz, 200MHz; Analog control, analog modulation		TTL on/off option			
Transverse mode	Circular beam, close to TEM ₀₀ , M ² < 1.2					
Beam diameter (1/e ²)	1 mm					
Beam divergence	0.6 mrad					
Beam pointing stability	< 0.02 mrad					
Polarization ratio	100:1; Vertical linear polarization					
Operation temperature	5°C to 40°C, internal TEC temperature-stabilized, no additional heat sink required					
Warm-up time	< 30 seconds					
Operation voltage	90-250 VAC or 12VDC OEM version 11-16VDC					
Dimensions and weight of laser head	3x3x12 cm ³ (1.2x1.2x4.7 in ³) with a fixed 6 mm thick plate, 0.3kg (0.6 lb)					
Dimensions and weight of power supply	Standard AC: 5x14x15 cm ³ (2x5.5x6 in ³), 0.5 kg (1 lb); CL-2005 power display AC: 5x16x15 cm ³ 12VDC OEM version: Integrated inside the laser head.					
* BCL-1W-405 and BCL-1W-440	405 nm or 444 nm, 1 W, 400 um fiber coupled output					
* BCL-200-405 and BCL-300-405	406 +/- 4 nm, 200 mW or 300 mW, Beam diameter 1.5 mm, Beam divergence 1.2 mrad, M ² =3					
* BCL-400-440	446 +/- 4 nm, 400 mW, Beam diameter 1.5 mm; Divergence 1.2 mrad, M ² =3					

Applications: Holographics, Flow cytometry, Fluorescence, Confocal microscopy, Raman Spectroscopy

Fiber coupling option: Single mode and multi-mode fiber delivery



All dimensions in mm

Front View

Laser beam is output from this aperture

