

LCX-946S

DPSS

Optical characteristics *

Emission wavelength 946.0 nm (±0.3 nm)

Wavelength stability over 8 hours and $\pm 3^{\circ}$ K $\leq 1 \text{ pm}$ Linewidth $\leq 1 \text{ MHz}$

Coherence Length ≥ 100 m

Output power Free space Fiber coupled

50 mW 35 mW

Control mode(s) Automatic Power Control (APC)

Power stability
over 8 hours and within ±3k ±1%

Power adjustment range with L1C MPA/AOM

Optical noise %RMS, 10Hz - 20 MHz bandwidth ≤ 0.2%

- Transverse singlemode free-space beam

Beam waist diameter (typ) at 1/e², 50mm from output aperture 0.7 mm (±0.1 mm)

Beam divergence at 1/e², full angle, in far field 1.9 mrad (±0.2)

Beam quality factor (M^2) ≤ 1.1

Beam circularity, ≥ 90%

Polarization 1000:1

extinction ratio (typ)

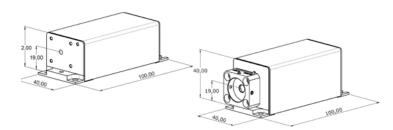
Polarization state linear, vertical at +/-5°

Fiber coupling option

Specifications	SM and PM Fiber	MM Fiber
Coupling Efficiency	≥ 70%	(50 μm, 0.22 NA) ≥ 80%
Polarization Ratio	100 : 1	n/a
Fiber Output Connector	FC-ACPC FC/PC, FCP8 on demand	FC-APC
Power stability over 8 hours and within ±3k	±2%	±2%
Fiber length	2.0 m	2.0 m



System specifications



- Plug and Play version provided with:

- Electro-mechanical shutter
- ControlBoxx
- Power supply

Other options

Heat sink

General specifications

	Plug and Play version	OEM version	
Compliance	CE FDA 21 CFR 1040.10/1040.11	FDA 21 CFR 1040.10 / 1040.11	
Operating temperature	10 - 38°C ambiant air with optional heat sink	10 - 50°C baseplate	
Power consumption	≤ 25 W	≤ 20 W	
Storage temperature	0 to 60°C		
Supply voltage	100 to 240 VAC external power supply	5 to 12 VDC	
Warm-up time	≤ 10 minutes		
Interfaces	USB, RS-232, dedicated electronic interface		

*Specifications at nominal power

Warranty: 18 months from shipment date

