

# LSX-785S-ISO

Diode

## Optical characteristics \*

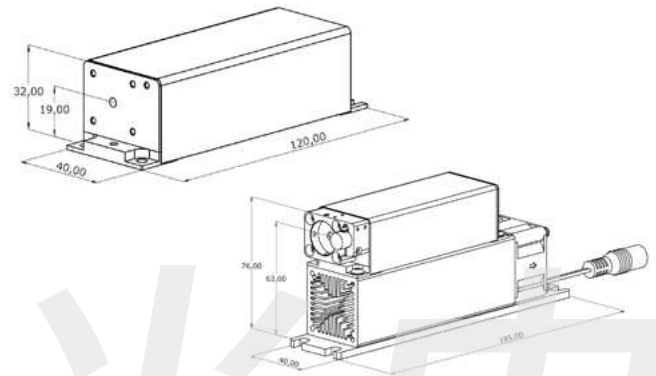
<b>Emission wavelength</b>	785 nm ( $\pm 0.5$ nm)	
<b>Wavelength stability</b> over 8 hours and $\pm 3^\circ\text{K}$	$\leq 10$ pm	
<b>Linewidth</b>	$\leq 100$ MHz typ.	
<b>Coherence Length</b>	$\geq 1$ m typ.	
<b>Output power</b>	<b>Free space</b> 150 mW with isolator	<b>Fiber coupled</b> 105 mW
<b>Control mode(s)</b>	Automatic Current Control (ACC)	
<b>Power stability</b> over 8 hours and within $\pm 3\text{k}$	$\pm 1\%$	
<b>Power adjustment range</b> optional	with L1C MPA / AOM	
<b>Optical noise</b> %RMS, 10Hz - 20 MHz bandwidth	$\leq 0.2\%$	
<b>— Transverse singlemode free-space beam</b>		
<b>Beam waist diameter (typ)</b> at $1/e^2$ , 50mm from output aperture	0.5 mm ( $\pm 0.1$ mm)	
<b>Beam divergence</b> at $1/e^2$ , full angle, in far field	$\leq 1.7$ mrad	
<b>Beam quality factor (<math>M^2</math>)</b>	$\leq 1.25$	
<b>Beam circularity,</b> in far field	$\geq 90\%$	
<b>Polarization</b> <b>extinction ratio (typ)</b>	100:1	
<b>Polarization state</b>	linear, vertical at $\pm 5^\circ$	

## Fiber coupling option

Specifications	SM and PM Fiber	MM Fiber (50 $\mu\text{m}$ , 0.22 NA)
Coupling Efficiency	$\geq 70\%$	$\geq 80\%$
Polarization Ratio (PMF only)	100 : 1	n/a
Fiber Output Connector	FC-APC FC/PC, FCP8 on demand	FC-APC
Power stability over 8 hours and within $\pm 3\text{k}$	$\pm 2\%$	$\pm 2\%$
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
<b>Compliance</b>	CE FDA 21 CFR 1040.10/1040.11	FDA 21 CFR 1040.10 / 1040.11
<b>Operating temperature</b>	10 - 38°C ambient air with optional heat sink	10 - 50°C baseplate
<b>Power consumption</b>	$\leq 25$ W	$\leq 20$ W
<b>Storage temperature</b>	0 to 60°C	
<b>Supply voltage</b>	100 to 240 VAC external power supply	5 to 12 VDC
<b>Warm-up time</b>	$\leq 10$ minutes	
<b>Interfaces</b>	USB, RS-232, dedicated electronic interface	

\*Specifications at nominal power

Warranty : 18 months from shipment date



## CONTACT US

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