MCI Series
2.5ns Microchip Laser

Applications

Laser-induced fluorescence (LIF)

Laser-based ultrasound detection

Laser ranging

Raman spectroscopy

Key Features

- Compact design, excellent stability
- Polarization-stable
- Repetition rate up to 1kHz
- Spatial mode TEM_{00}

Technical Specifications

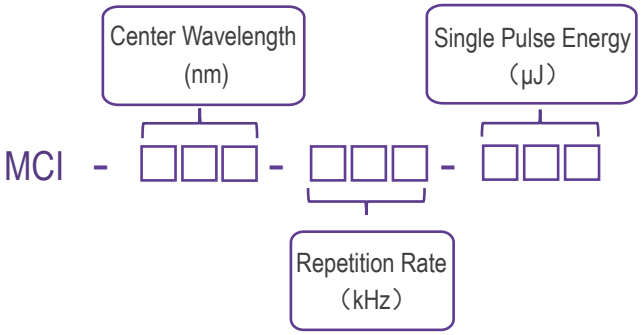
Optical Parameters			
Wavelength (nm)		946	473
Repetition rate (kHz)		1	1
Average power (mW)		20	4
Pulse energy (μJ)		20	4
Pulse width (ps)		2500	2000
Power stabilty (8h)		±3%	
Beam profile		TEM_{00}	
Beam full divergence (typ., mrad)	Horizontal @1/e²	9	7
	Vertical @1/e²	9	7
Polarization ratio		>100:1	
System Parameters			
Supply power voltage		100-240 VAC,50/60 Hz	
Control interface		RS232, USB	
Power consumption (W)		≤15	≤15
Power dimensions (W×H×L,mm)		168×88×140	
Laser head dimensions (W×H×L,mm)		45×33×120	
Operation temperature (℃)		15~35	
Storage temperature (℃)		0~60	

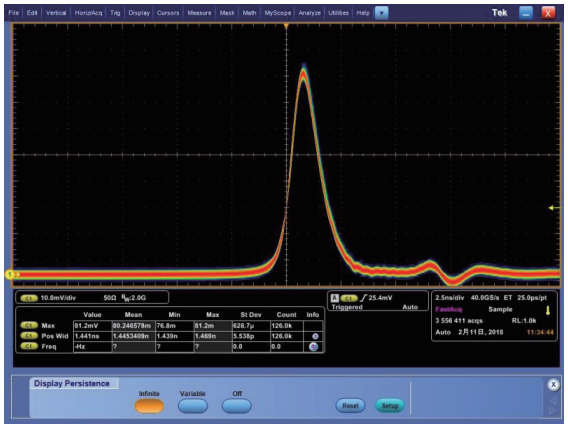
1. *Side laser outlet configuration（middle laser outlet configuration unless otherwise stated）
Lasers with repetition rate < 20kHz are positive-edge-triggered, and lasers with repetition rate > 20kHz are gate-triggered. All systems rely on 5V TTL levels and have SMA interfaces for external triggering input. See mechanical specifications for more details!
2. Built-in beam expander and collimator are available upon request, and divergence can be less than 2mrad.
3. All the data in the above table are the typical values obtained from the tests at room temperature of 25℃, and the final data is subject to the final test report.

Order Information

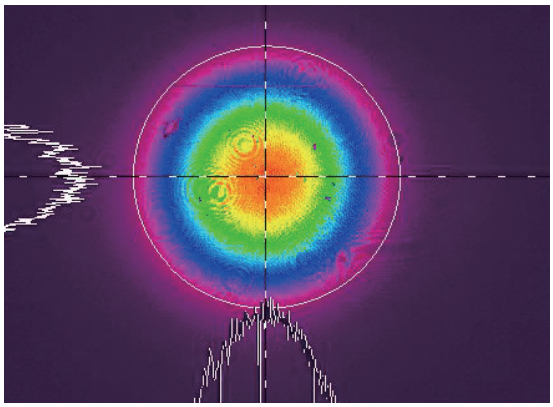
Wavelength（nm）	Part Number	Repetition rate (kHz)	Pulse energy (μJ)
946	MCI-946-1-20	1	20
473	MCI-473-1-4	1	4

Part Numbering Schema



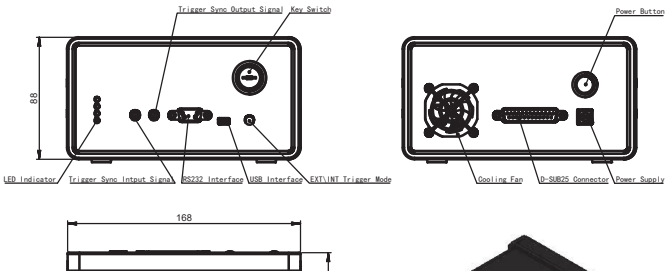


Typical Pluse

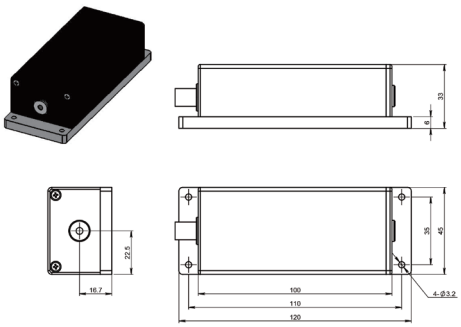


Beam Profile

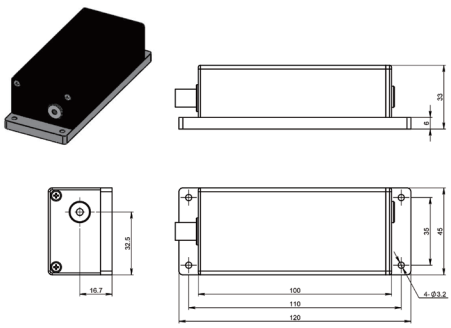
Mechanical Drawings (in mm)



Power Supply



Laser Head (middle laser outlet)



Laser Head (side laser outlet)