



MCI Series 2.5ns Microchip Laser



Key Features

- ◆ Compact design, excellent stability
- ◆ Polarization-stable
- ◆ Repetition rate up to 5kHz
- ◆ Spatial mode TEM₀₀

Applications

- Laser-induced fluorescence (LIF)
- Laser-based ultrasound detection
- Laser ranging
- Raman spectroscopy

Technical Specifications

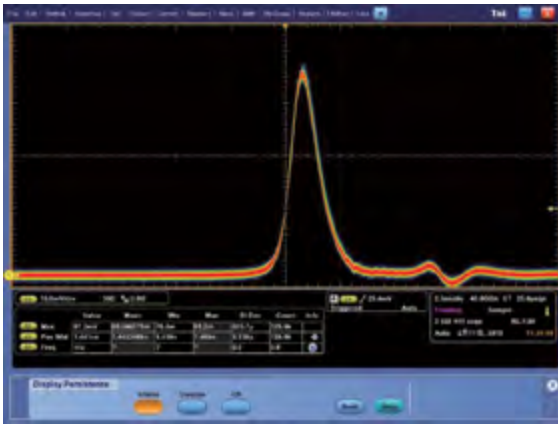
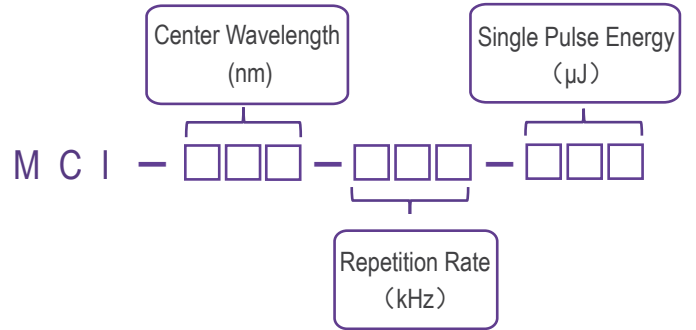
Optical Parameters						
Wavelength (nm)	946		473		237	
Repetition rate (kHz)	1	5	1	5	2*	
Average power (mW)	20	75	5	20	2	
Pulse energy (µJ)	20	15	5	4	1	
Pulse width (ps)	2500		2000		1500	
Power stability (8h)	±3%					
Beam profile	TEM ₀₀					
Beam full divergence (typ., mrad)	Horizontal @1/e ²	9	10	7	8	6
	Vertical @1/e ²	9	10	7	8	6
Polarization ratio	>100:1					
System Parameters						
Supply power voltage	100-240 VAC, 50/60 Hz					
Control interface	RS232, USB					
Power consumption (W)	≤15	≤30	≤15	≤30	≤25	
Power dimensions (W×H×L,mm)	168×88×140					
Laser head dimensions (W×H×L,mm)	45×30×120					
Operation temperature (°C)	15-35					
Storage temperature (°C)	0-60					

- *Laser head features side laser outlet, please see mechanical drawings for more details.
- Built-in beam expander and collimator are available upon request, and divergence can be less than 2mrad.

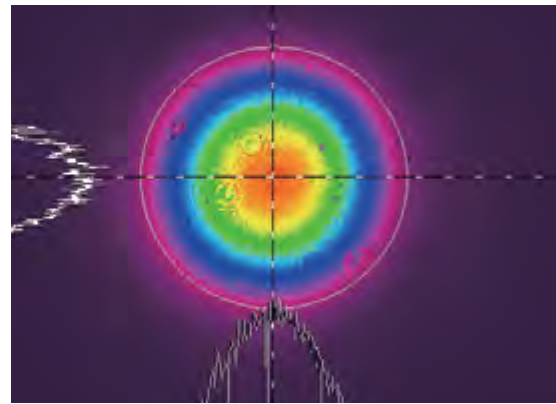
Order Information

Wavelength (nm)	Part Number	Repetition rate (kHz)	Pulse energy (μJ)
946	MCI-946-1-020	1	20
	MCI-946-5-015	5	15
473	MCI-473-1-005	1	5
	MCI-473-5-004	5	4
237	MCI-237-2-001	2	1

Part Numbering Schema

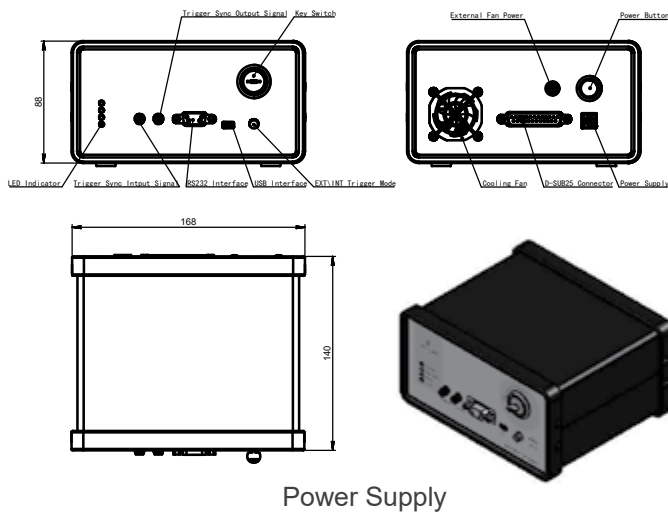


Typical Pulse

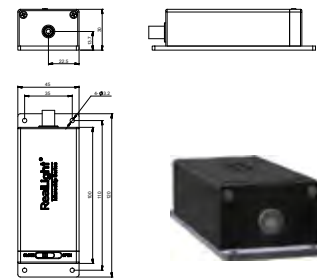


Beam Profile

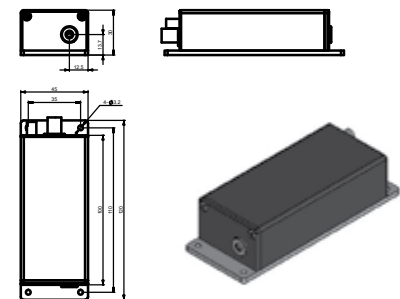
Mechanical Drawings (in mm)



Power Supply



Laser Head (middle laser outlet)



Laser Head (side laser outlet)

