

532nm Active Q-Switched Laser



DESCRIPTION

This series of products include active Q-switching and passive Q-switching microchip two technical solutions to generate sub nanosecond optical pulses, output sub nanosecond laser pulses while maintaining excellent beam quality. For the active Q-switched technology, the jitter of the output optical signal and the trigger signal is less than 1 ns, and for the passive Q-switched microchip laser, the jitter of the output signal and the external trigger signal is less than 10 μ s. The laser can be used alone or as seed source of laser amplifier. At the same time, the laser amplifier of our company can be used to amplify the energy to tens of mJ. At the same time, the wavelength can be extended to 532nm, 355nm, 266nm, etc. The product has the advantages of good beam quality, high peak power, reliable performance, compact structure, simple operation and maintenance. Combined with excellent production technology, this series of products can meet the requirements of airborne, vehicle mounted, high and low temperature and other harsh environments.

FEATURES

- Active Q
- Narrow pulse width and high peak power
- High stability and compact structure
- High beam quality

APPLICATIONS

- Laser Radar
- Point Cloud Imaging Radar
- Ranging
- Laser Remote Sensing
- Photoelectric Detection
- Laser Fine Processing



PARAMETERS

		CL532-3mJ-AQNL001	CL532-5mJ-AQNL002	CL532-10mJ-AQNL003
Optical Parameter	Energy @532nm	3mJ	5mJ	10mJ
	Energy stability	< 3%	< 3%	< 3%
	Repeat frequency	1~10kHz	1~5kHz	1~5kHz
	Pulse Width	< 1.5ns	< 1.5ns	< 1.5ns
	Beam quality M2	< 2	< 2	< 2
	Divergence (full angle)	<1mrad	<1mrad	<1mrad
	Spot diameter (1/e ²)	~2mm	~2mm	~4mm
Function Parameter	Control interface	DB9,RS422	DB9,RS422	DB9,RS422
	cooling method	Water cooling	Water cooling	Water cooling
	powered by	220VAC/50Hz	220VAC/50Hz	220VAC/50Hz
Environmental Requirements	Operating temperature	15-35°C	15-35°C	15-35°C
	storage temperature	-15-50°C	-15-50°C	-15-50°C
	humidity	0-80%	0-80%	0-80%
Weight & Size	Power Weight	Customized	Customized	Customized
	Laser head size	Customized	Customized	Customized
	Power size	Customized	Customized	Customized

STRUCTURE

