

AQE Series Diode-Pumped Active Q-switched Laser



The AQE Series RealShock® diode-pumped active Q-switched laser employs RealLight's self-developed laser diode as the pump source. It features compact footprint and long service life, alongside superior energy and pulse-width stability. The AQE series supports an adjustable repetition rate of 50~100 Hz, delivering single-pulse energy greater than 10 mJ with pulse width of 3 ns. It provides outstanding beam quality and can be focused down to 400 μm . Integrated drive-and-control circuitry and air-cooled heat dissipation, the laser facilitates easy system integration.

Key Features

- ◆ Built-in optical shutter
- ◆ Built-in energy detector
- ◆ Integrated design for easy system integration
- ◆ Excellent beam-spot uniformity
- ◆ No water cooling required

Application

- ◆ Spectral analysis
- ◆ Laser surgery
- ◆ Precision measurement

Technical Specifications

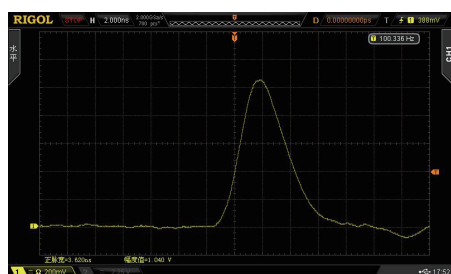
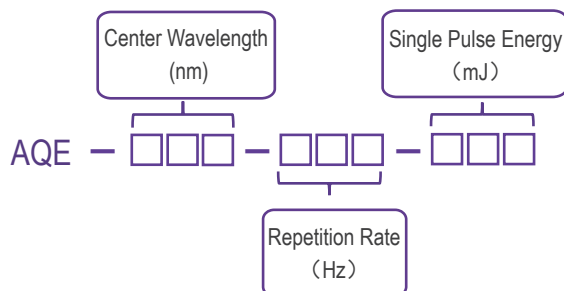
Optical Parameters		
Wavelength (nm)		1064 532
Repetition rate (Hz)		100
Pulse energy (mJ)		10 3
Pulse width typ. (ns)		3
Energy stability (RMS)		2% 3%
Full angle divergence typ. (mrad)	Horizontal @1/e ²	<3
	Vertical @1/e ²	<3
Cooling method		Air cooling
Laser dimensions (W×H×L,mm)		148×70×260
Operation temperature (°C)		10~35
Storage temperature (°C)		-20~60
Driver Parameters		
Supply power voltage		24VDC
Control interface		RS232/IO
Power consumption (W)		50
Trigger mode		Trigger In/Out

All the data in the above table are the typical values obtained from the tests at room temperature of 25°C, and the final data is subject to the final test report.

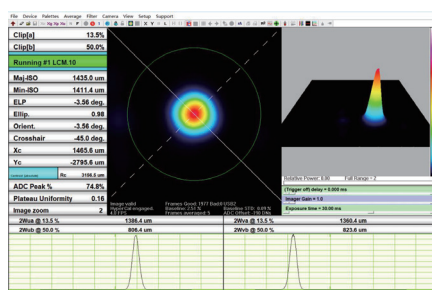
Order Information

Wavelength (nm)	Part Number	Repetition rate (Hz)	Pulse energy (mJ)
1064	AQE-1064-100-10	100	10
532	AQE-532-100-3	100	3

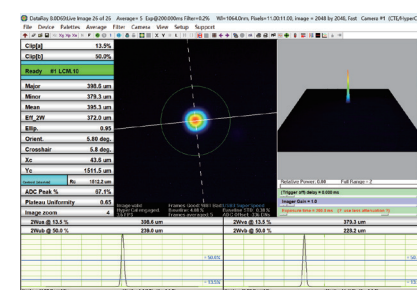
Part Numbering Schema



Pulse Width



Raw Beam Spot



400µm Focused Spot

Mechanical Drawings (in mm)

