AQE Series

High Energy Solid-state Laser



The AQE series is a self-developed actively Q-switched DPSS laser by RealLight. Utilizing our proprietary GS-series diode laser arrays as the pump source, it features an integrated laser head and power supply design. With high pulse energy, compact size, and low power consumption, it is particularly suitable for LIBS and laser ablation applications.

Key Features

- Pulse energy ≥50mJ
- Compact size
- Conduction cooling
- Exceptional cost performance

Applications

Laser ablation

Laser-induced breakdown spectroscopy (LIBS)

Optical damage threshold testing

Technical Specifications

Optical Parameters					
Wavelength (nm)		1064	532		
Repetition rate (Hz)		20			
Pulse energy (mJ)		50	30		
Pulse width (ns)		<6			
Power stabilty (RMS)		<3%			
Full angle divergence typ. (mrad)	Horizontal @1/e²	<4			
	Vertical @1/e²	<4			
Beam diameter (at output port, mm)		2.5			
Cooling method		air cooling			
Laser dimensions (W×H×L,mm)		85×60×130			
Operation temperature (°C)		10~35			
Storage temperature (°C)		-20~60			
Driver Parameters					
Supply power voltage		24VDC			
Control interface		J30J~15 Z KL			
Power consumption (W)		45W (MAX)			
Trigger mode		Trigger In/Out			

All the data in the above table are the typical values obtained from the tests at room temperature of $25\,^{\circ}$ C, and the final data is subject to the final test report.

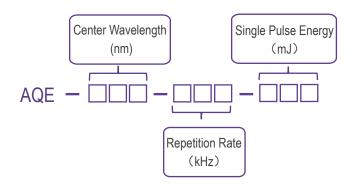




Order Information

Wavelength (nm)	Part Number	Repetition rate (kHz)	Pulse energy (mJ)
1064	AQE-1064-0.02-50	0.02	50
532	AQE-532-0.02-30	0.02	30

Part Numbering Schema



Mechanical Drawings (in mm)

