# **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

Spectrum analysis

Radar ranging

#### **Technical Specifications**

Optical Parameters						
Wavelength (nm)		1064	532	355		
Repetition rate (Hz)		20				
Pulse energy (mJ)		50	30	15		
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 85×		85×60×175		
Operation temperature (°C)		10~35				
Storage temperature (°C)		-20~60				
Driver Parameters						
Supply power voltage		24VDC				
Control interface		J30J~15ZKL				
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  $25\,\mathrm{C}$ , and the final data is subject to the final test report.

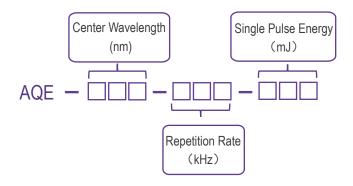




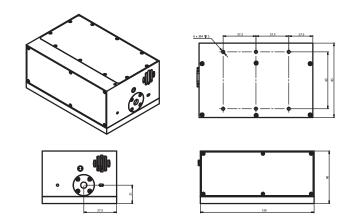
#### **Order Information**

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
355	AQE-355-0.02-15	0.02	15

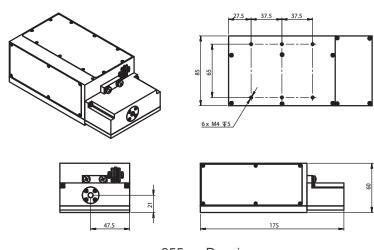
## Part Numbering Schema



## Mechanical Drawings (in mm)



1064nm & 532nm Drawing



355nm Drawing

