AQE Series 180mJ Diode Pumped Actively Q-switched Laser

The AQE series is a self-developed stack-pumped actively Q-switched laser by RealLight, which utilizes our proprietary diode laser arrays for multi-directional uniform pumping, delivering actively Q-switched laser output with high energy, high stability, and excellent beam uniformity. Featuring a hermetically sealed laser resonator and an integrated driving control circuit, this product is widely used in fields such as aesthetic medicine, radar ranging, precision machining and scientific research.

Key Features

- Multiple wavelengths available: 1064/532/355/266nm
- Conduction cooling,high stability
- Supports both internal and external trigger functions
- Excellent beam uniformity,stable pointing
- Wide-temperature operation products are available for customization

Applications

Spectrum analysis

Biomedicine

Laser manufacturing

Radar ranging

Scientific research

Technical Specifications

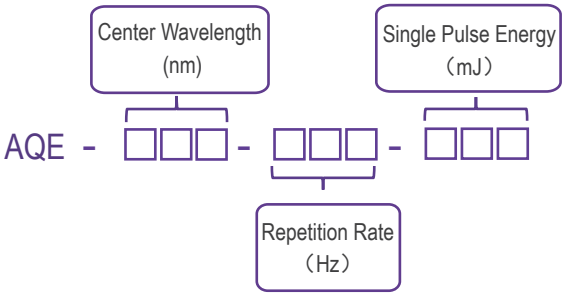
Optical Parameters					
Wavelength (nm)		1064	532	355	266
Repetition rate (Hz)		1~10			
Pulse energy (mJ)		180	100	50	20
Pulse width (ns)		≤10			
Power stabilty (RMS)		≤8%			
Full angle divergence typ. (mrad)	Horizontal @1/e²	≤4			
	Vertical @1/e²	≤4			
Beam diameter (at output port, mm)		6			
Cooling method		Air cooling			
Laser dimensions (W×H×L,mm)		160×85×230			
Operation temperature (℃)		10~35			
Storage temperature (℃)		-20~60			
Driver Parameters					
Supply power voltage		24VDC			
Control interface		J30J~21P			
Power consumption (W)		200W			
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℃, and the final data is subject to the final test report.

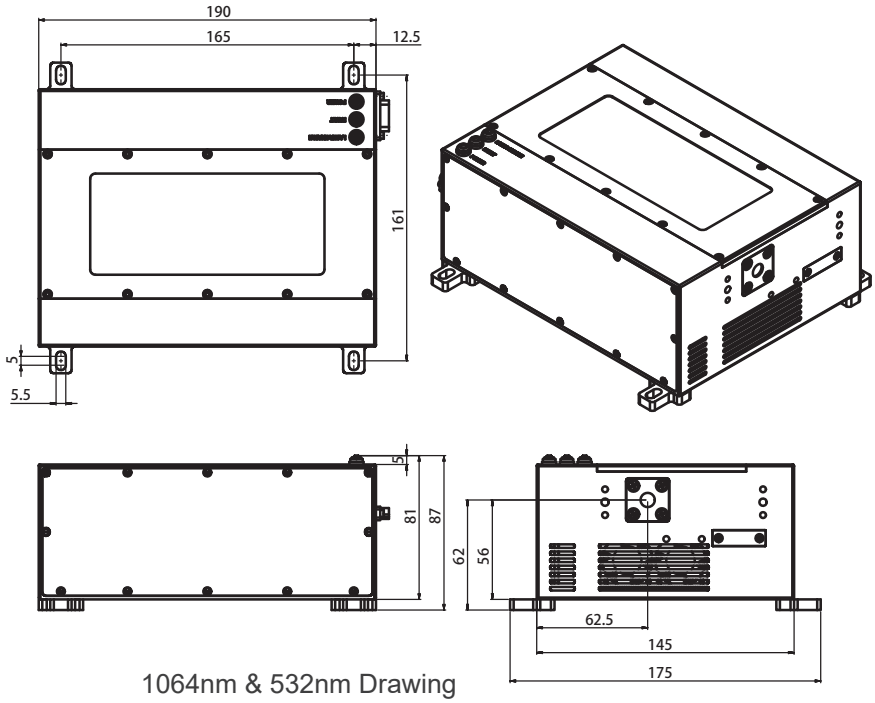
Order Information

Wavelength (nm)	Part Number	Repetition rate (Hz)	Pulse energy (mJ)
1064	AQE-1064-10-180	10	180
532	AQE-532-10-100	10	100
355	AQE-355-10-50	10	50
266	AQE-266-10-20	10	20

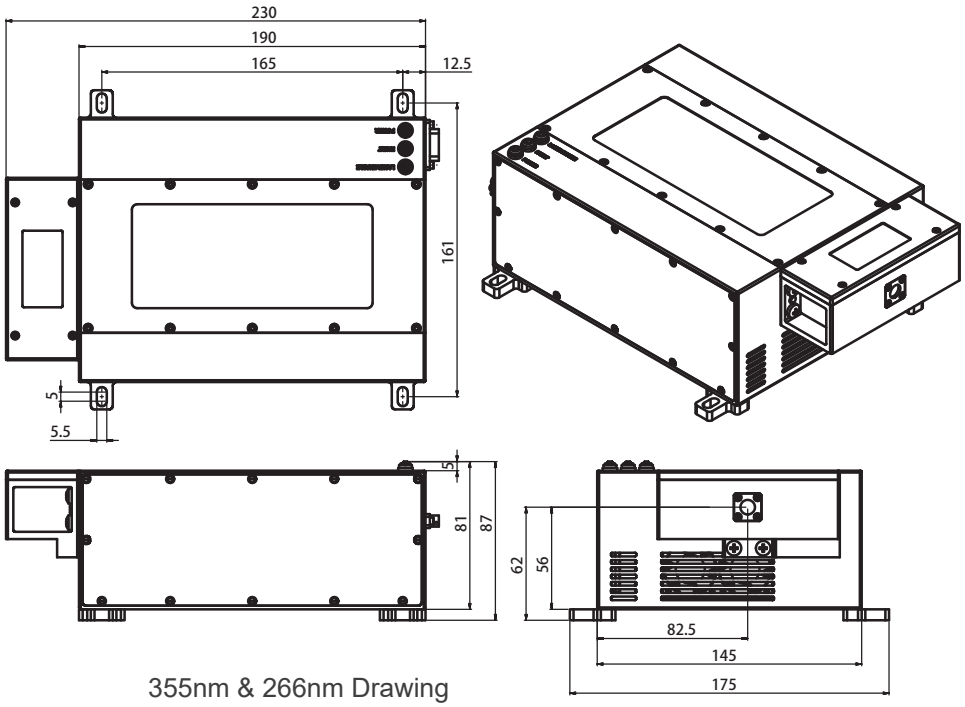
Part Numbering Schema



Mechanical Drawings (in mm)



1064nm & 532nm Drawing



355nm & 266nm Drawing