

# ▶ Diode Pumped Alexandrite Lasers

## ▶ TECHNOLOGY SUMMARY

Unilase is introducing the first ever commercial products based on its CW, pulsed and tunable Alexandrite laser technology to address increasing demand for laser sources in quantum tech applications, photoacoustic imaging and LIDAR to name just a few.

Unilase diode pumped Alexandrite lasers are high performance sources capable of delivering multi-watt level CW or mJ class pulsed output in compact footprints.

Alexandrite lasers can be set to provide near-SLM output at a fixed wavelength or narrowband tunable output over 50nm with excellent beam quality.

The fundamental wavelength output from the Alexandrite laser can be further extended into the shorter wavelengths to provide tunable UV output.

## ▶ APPLICATIONS

Quantum Technologies

LIDAR and Remote Sensing

Biosensing and Imaging

Material Characterisation

Test and Measurement

Scientific Research

## ▶ BENEFITS

Compact, rugged and robust

Lower cost

Multiple demanding applications

Integrated thermal management

## ▶ FEATURES

Broad tunability (NIR to UV)

Narrowband

High Power CW

Short Pulse



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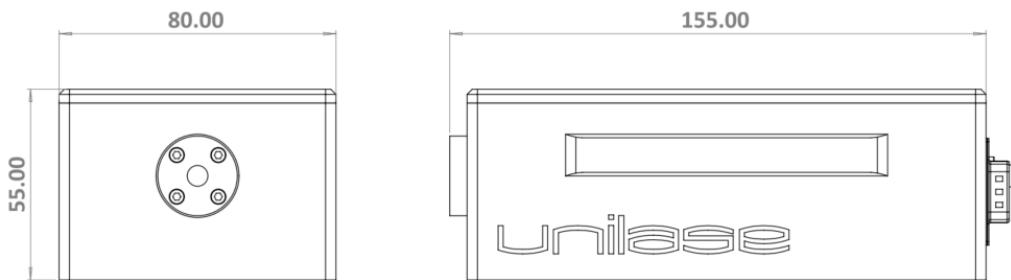
Unilase Ltd  
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▶ **LASER PARAMETERS**

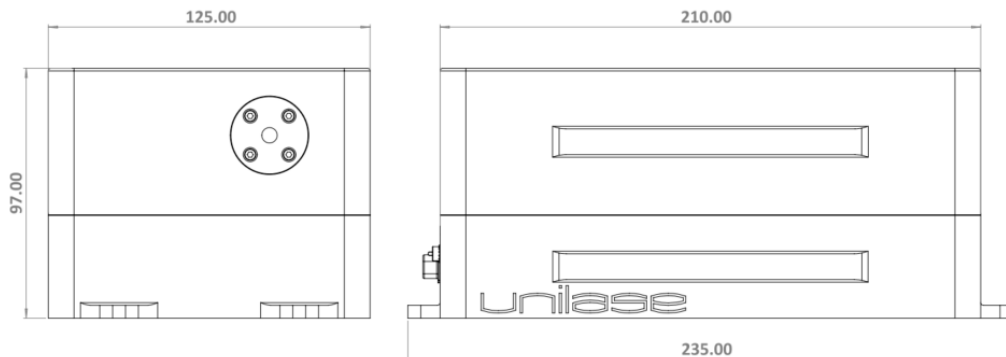
Laser Type	CW	Short Pulse	Long Pulse
Output Power [W]	Up to 5	-	-
Output Energy [mJ]	-	>0.1	>1
Pulse Duration [ns]	-	<5	>50
Repetition Rate [kHz]	-	1-10	
Operating Wavelength [nm]	760		
Wavelength range [nm]	730-790		
Tunability [nm]	>30		
Linewidth [nm]	<1		
Beam Quality [M <sup>2</sup> ]	<1.5		
Polarisation ratio	>100:1, linear		

▶ **MECHANICAL DIMENSIONS**

**CW Laser**



**Pulsed Laser**



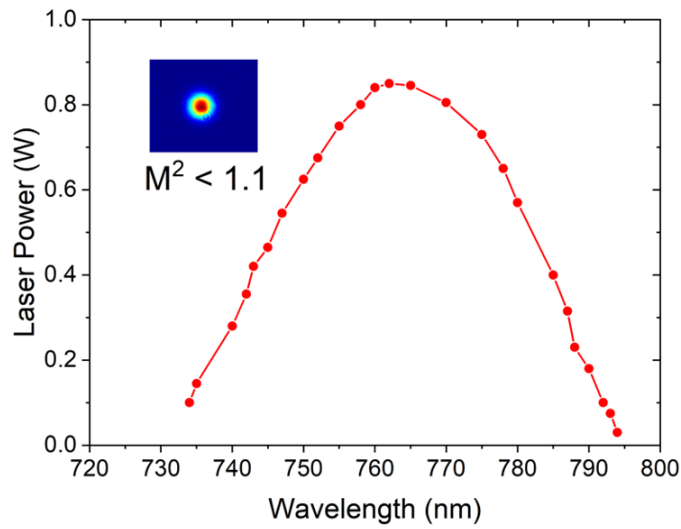
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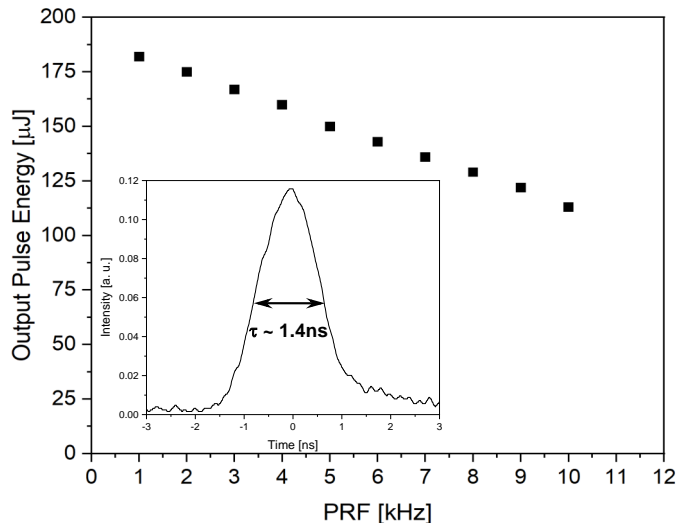
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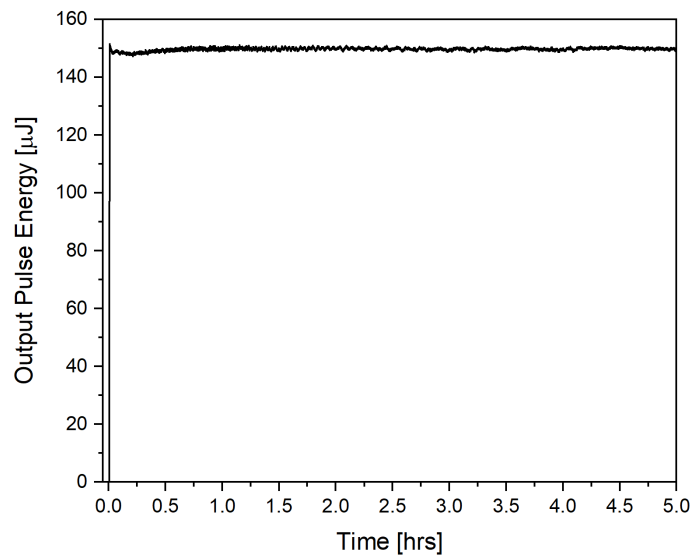
**BROAD TUNABILITY**



**SHORT PULSE OUTPUT**



**LONG-TERM STABILITY**



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