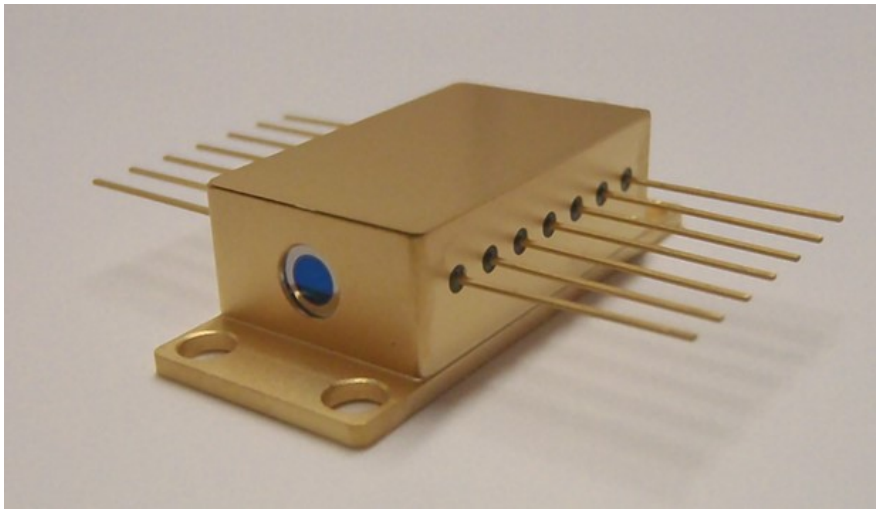


## DIODE LASER MODULES FOR ALL APPLICATIONS



## REMOTE

ECDL

**COMPACT & ROBUST EXTERNAL CAVITY DIODE LASER****30 X 12.7 X 8.9 mm<sup>3</sup>**

The REMOTE is ideally suited for use in quantum technology and spectroscopy applications. The laser module is fabricated using Alter Technology UK's advanced packaging techniques that employ high reliability telecoms manufacturing and space qualified processes to minimise size and maximise stability and reliability in a hermetically sealed package.

**Key Features**

Hermetically sealed package

External Cavity Diode Laser (ECDL) at 780.24 nm

Manufactured using space &amp; telecoms qualified processes

Coefficient of Thermal Expansion (CTE) matched materials

Vibration Immune: short cavity laser diode with no moving parts or piezos

**Benefits**

Size, Weight, Power and cost (SWAP-C) design

14-pin BTF package

Robust, reliable and miniaturised laser

Alignment-free, stable and reliable

High power &gt; 100 mW

Narrow linewidth

Integrated temperature sensor for precision control

The REMOTE product has been developed in conjunction Fraunhofer UK, at the Fraunhofer Centre for Applied Photonics, Glasgow UK.

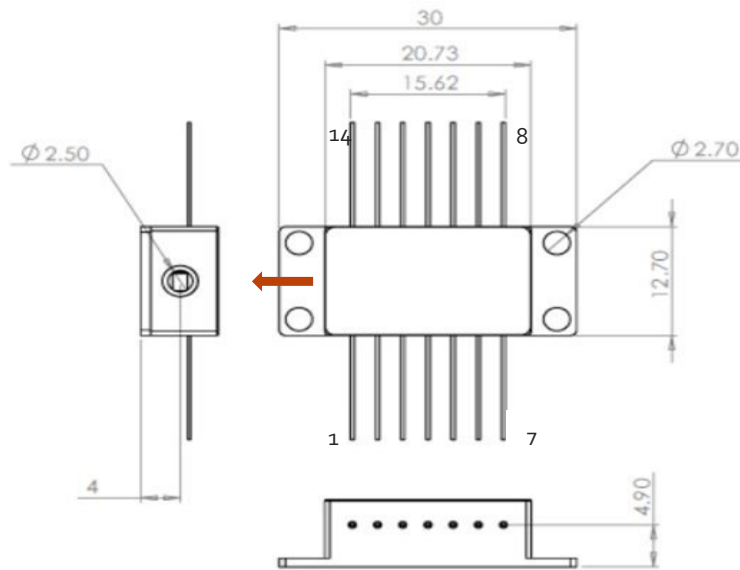


The REMOTE development programme was initiated with support from Innovate-UK.

**Innovate UK****Applications**

Raman Spectroscopy/ Quantum Technologies/Metrology and Interferometry

pin	Description
1	Cooler (+)
2	Thermistor
3	N/C
4	N/C
5	Thermistor
6	N/C
7	N/C
8	N/C
9	N/C
10	Laser Anode (+)
11	Laser Cathode (-)
12	N/C
13	N/C
14	Cooler (-)



### Typical Performance<sup>+</sup>

REMOTE	Wavelengths*		
Parameter <sup>+</sup>	780.24	785	852
Output power <sup>o</sup>	>100mW	>200mW	>100mW
Linewidth <sup>*</sup>	<100 kHz		
Mode-hop free tuning	>4 GHz		
Beam characteristics	< 1 mm FWHM, TEM <sub>00</sub>		
Divergence	< 2 mrad FWHM		
Polarization	Linear, 100:1		
Operating temperature range	+15 °C to +30 °C		

NOTES

- \*Other wavelengths available on request
- <sup>o</sup>100 ms averaging time
- <sup>o</sup>output power levels are determined by COS and could be higher depending on availability of suitable COS
- Alter Technology UK offers a limited warranty on workmanship for all engineering samples, and as such laser safety/system classification are the responsibility of the integrator. For details please contact Alter Technology.
- <sup>+</sup>Alter Technology follows a policy of continuous product improvement, specifications are subject to change without notice.
- Please note that Alter Technology provides no reliability or life span data or warranty as these modules are currently under development.

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