

ALTER
TECHNOLOGY



FLAME-780
FREQUENCY-
STABILISED LASER
MODULE WITH
INTEGRATED
REFERENCE CELL

COMPACT & ROBUST FREQUENCY-STABILISED LASER

ONLY: 60 x 40 x 16 mm³

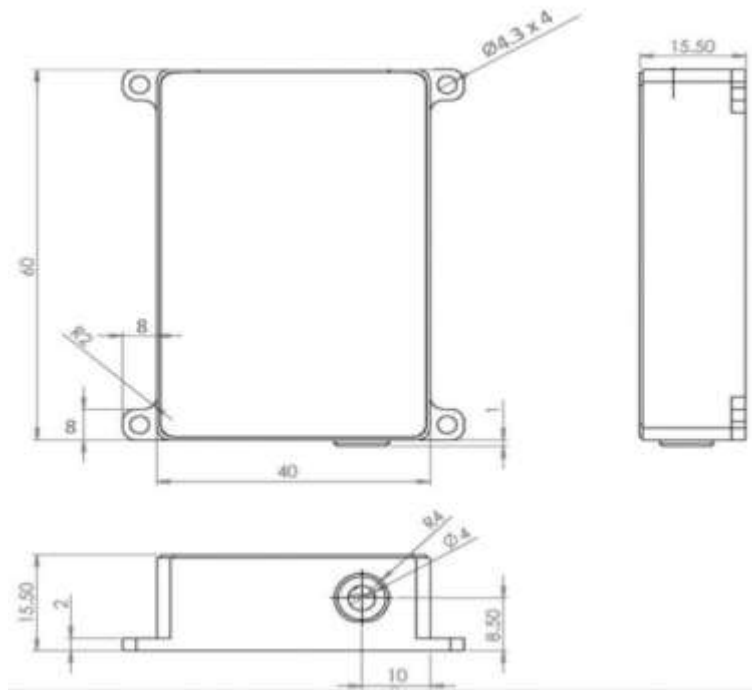
FLAME-780 is a compact, frequency stabilised laser module with integrated vapour cell that allows locking to spectral features of an atomic reference. The FLAME laser module is fabricated using Alter Technology UK's advanced packaging techniques that employ high reliability telecoms manufacturing and space qualified processes.

Key Features

- Robust miniaturised laser with integrated reference cell
- 150 mW output power
- Small size, 60 x 40 x 15.5 mm
- Typical linewidth: 150 kHz, 100ms
- Available with free space or fibre output
- 780 nm standard, other wavelengths available on request

Benefits

- Low size, weight, power and cost (SWAP-C) design
- Alignment-free, stable and reliable
- Vibration immune: short cavity laser diode with no moving parts or piezos
- 40 GHz mode-hop free tuning
- Integrated temperature sensor for precision control



Typical Performance

Parameter	Value
Wavelength ¹	780.24 nm
Linewidth	<200 kHz
Output power	>150mW
Amplitude stability with frequency control	< 0.1 %
Beam characteristics	0.5 mm FWHM, TEM ₀₀
Divergence	< 2 mrad FWHM
Polarization	Linear, 100:1
Operating temperature range	+15 °C to +30 °C

NOTES

1. Other wavelengths available on request

For more information:
<https://wpo-altertechnology.com>
 email: info@uk.altertechnology.com
 Tel: +44 (0)1506 403550