

QCL Laser Pointer

The Laser Pointer is a cutting-edge, all-in-one solution designed to meet your alignment operation needs. Equipped with either a Quantum Cascade Laser (QCL) or Interband Cascade Laser (ICL), this integrated system combines a ruggedized opto-mechanic system, driver, and temperature controller for optimal efficiency and precision.



The ultimate alignment tool

The default chip installed in the QCL Laser Pointer is a 8 micron Fabry-Perot (spectally multimode) chip, but other QCL or ICL chips provided by Alpes Lasers can also be installed in this system, ask us for a custom device.

Key Features

- Visible and Mid-IR co-linear beams
- Simple on/off operation
- Push-button or remotely controlled operation
- Active air cooling
- Easy alignment with leveling feet
- Compatible with imperial and metric optical breadboard
- Advanced fixture solutions embedded for OEM integration
- Output Power consistent with Class 1 criteria's for unprotected beam exposure.

Key Applications

- Mid-IR Target Pointer
- Mid-IR/Visible Alignment Beam
- Blinking Beacon



PARAMETER NAME	MINIMUM VALUE	TYPICAL VALUE	MAXIMUM VALUE	UNIT	NOTE
Beam Diameter	3.2	4	4.8	mm	Diameter at internal packaging window exit.
Beam Divergence	–	<6	8	mrad	Divergence, measured at $1/e^2$ from the peak of the distribution.
Beam Central Wavelength	3	8	12	microns	Central Wavelength is dependent on the chip installed; default value is 8.0 ± 0.5 microns but other chips are available on demand.
Pulse Length	–	500	–	ns	
Repetition Rate	–	200	–	kHz	
Output Power	–	5	9.6	mW	Output power is dependent on the chip installed. 9.6 mW max value is necessary for a Class 1 product.