

ALFALIGHT™

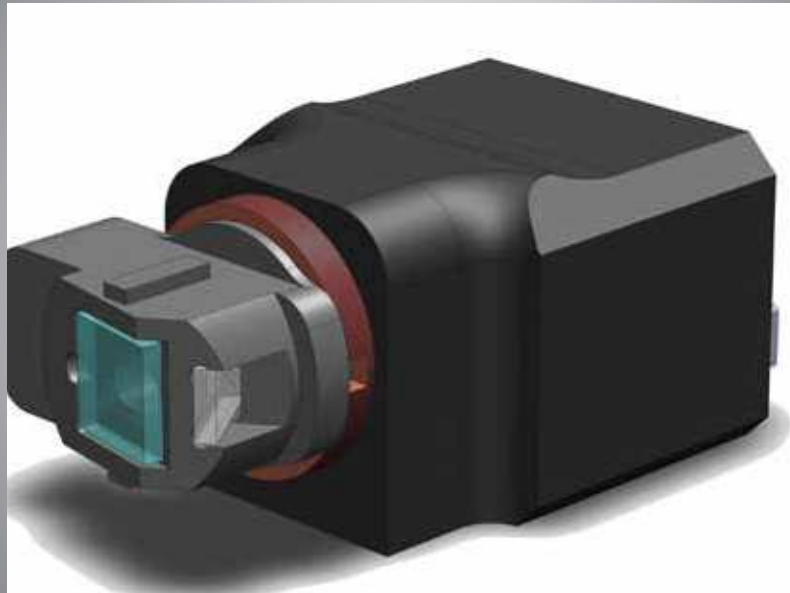
GLP-1H

Green Laser Module

PRELIMINARY

**Reliable power from
-20 to +50°C**

**330 mW green
laser light**



Compact package: 25 grams

Efficient: 3.5 watt consumption

Integrated optical feedback

Always instant-on

**Consistent operation over wide
temperature**

Illumination ⊕

Signalling ⊕

Visible designators ⊕

Ocular disruptors ⊕

Medical / Forensics ⊕

Battery-operated devices ⊕



Reliability.

Performance.

Innovation.

GLP-1H

Green Laser Module

PRELIMINARY

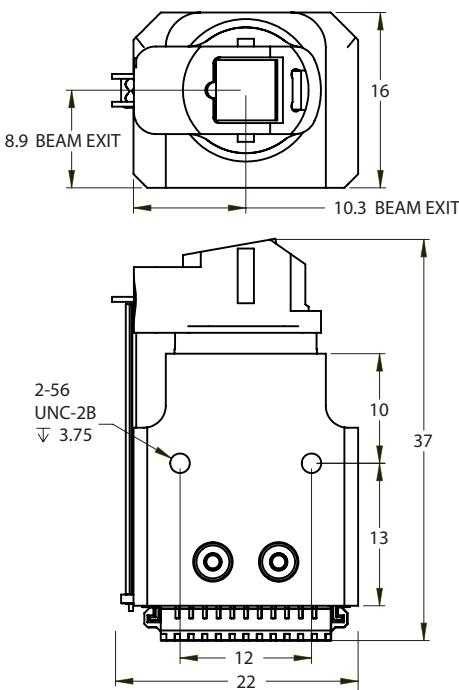
PRODUCT SPECIFICATION

Alfalight XGC-532C-02-350

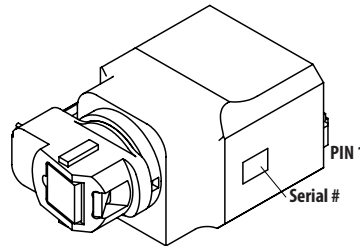
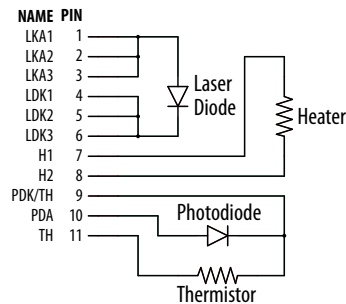
Key Features

- 330 mW of optical power
- Operating range of -20°C to +50°C
- Compact
- Rugged

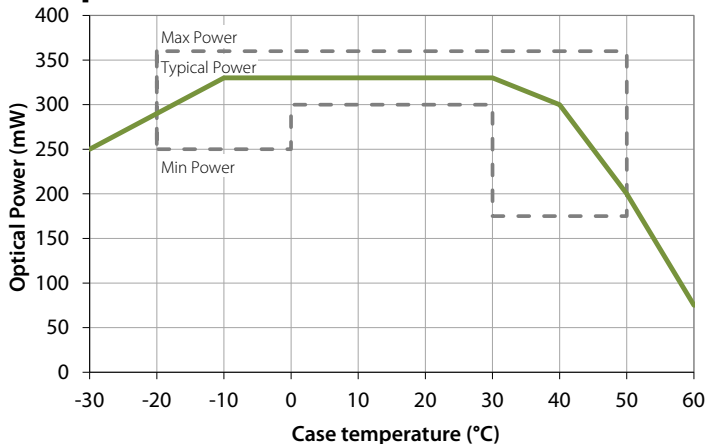
Mechanical



Pinout



Temperature Performance



Key specifications

Power	330 mW (nominal)
Wavelength	532 nm
Operating temp	-20 to +50 C (-4 to 122 F)
Operating mode	CW or pulsed
Size	33 × 22 × 19 mm
Weight	25 grams
Turn-on/rise time	Instantaneous output upon turn-on Full power < 1 second after turn-on
Standby warm-up**	0 seconds for case temperature 5 to 50 C 2 - 40 seconds for case temperature -20 to 5 C

Optical beam

Beam divergence	8 mrad typical (1/e; integrated telescope optional)
Beam diameter	~ 0.2 mm at exit
Safety	IEC Class 3B / CDRH IIIb device (< 500 mW) Laser component for integration, not FDA-compliant
Monitor PD	Integrated precision pickoff and photodiode

Package

Housing	Aluminum, environmentally sealed
Mounting	2 tapped 2-56 holes

Electrical (Laser Module)

Power consumption	3.5W typ (>5 C); 6.0W typ (≤5 C)
Inputs	Laser diode: 1.7 V @ 1.8 A typ, 2.4 A max Heater: 3.9 V @ 0.8 A typical (only below 5 C)
Outputs	Monitor photodiode (MPD): 50 μA typical @ 300 mW Thermistor: 10kΩ (3480 K beta)
Connector	11-position Molex picoblade male

Electrical (Driver)

Power input	3.0 to 6.5 volts, 0.8 A typical draw @ 6V
Control inputs	Fire (2 pins); Mode control (4 pins)
Outputs	Bi-color LED (3 pins) to indicate mode, laser firing, standby (heater on), battery low
Battery life	> 2 hours operating ON time (25 C) at 330 mW using 2 × CR-123A Li 3 V cells
Connectors	Molex picoblade (input and output)

Other

Storage temperature	-35 to +65 C
Ruggedness	<ul style="list-style-type: none"> ▪ Full power over operating temp range ▪ Shock: mechanical, thermal ▪ Vibration: operating and storage
Lifetime	30,000 h MTBF



ALFALIGHT™

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