

# **905nm EEL LiDAR Line Laser Transmitter Module** BeamRazor <sup>™</sup> Series - LE02 Pro Module



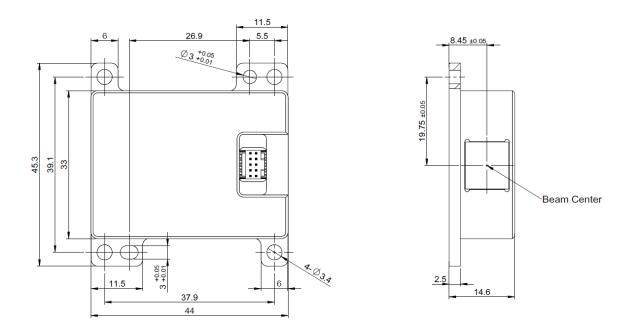
### Features

- Peak Power >700W
- Wavelength 905nm
- Small divergence (< 0.15° FA)</li>
- Short pulse (~5ns)

## **Applications**

- Automotive LiDAR
- 3D Sensing
- Industrial Sensing
- Machine Vision

## Product Dimensions (mm)



Remark: The structure drawing is for reference only. Please feel free to contact us for any special requirements.

All rights reserved. Product specifications and descriptions are subject to change. Product delivered with limited warranty. Please contact our sales representatives for complete details. Address: 56 Zhangba 6th Road, High-Tech Zone, 710077 Xi'an, Shaanxi, P. R. China Focuslight Technologies Inc. Tel: +86 29 8188 9945 | Email: sales@focuslight.com | Website: https://www.focuslight.com

# **Product Specifications (Prototype)**

#### **Product Code**

Part No.<sup>1</sup>

#### LET300035

| Test Condition | (Typical) |
|----------------|-----------|
|----------------|-----------|

FL-LE02 Pro-600-905-0.15x25 Input Pulse=10ns, Input Trigger=45kHz, HVDD=90V, Duty Cycle=0.045%, 20°C

| Optical Parameters                                    | Unit          | Value    |
|---|---------------|----------|
| Centroid Wavelength $\lambda$                         | nm            | 905±10   |
| Spectral Width FWHM                                   | nm            | <7       |
| Wavelength Temp. Coefficient                          | nm / °C       | ~0.27    |
| Module Output Peak Power <sup>2</sup>                 | W             | >700     |
| Laser Pulse Width @ FWHM                              | ns            | ~5       |
| Laser Pulse Rise Time                                 | ns            | ~2       |
| Operating Duty Cycle                                  | %             | < 0.1    |
| Laser Spot Size at Outlet (FA x SA)@FW                | mm^2          | ~8x7.4   |
| FOV — Fast Axis @ FW 1/e <sup>2</sup> (FA-Horizontal) | ٥             | < 0.15   |
| FOV — Slow Axis @ FW 1/e <sup>2</sup> (SA-Vertical)   | ٥             | ~25.6    |
| Electrical Parameter                                  |               |          |
| Logic Voltage DC                                      | V             | 7-12     |
| Operating High Voltage DC (HVDD)                      | V             | 20-90    |
| Input Operating Power (Recommended)                   | W             | <7       |
| Repetition Pulse Frequency (RPF)                      | kHz           | 10-75    |
| Input Trigger Voltage Amplitude                       | V             | 5        |
| Input Trigger Pulse Width                             | ns            | 10-100   |
| Input Trigger Pulse Rise Time (Recommended)           | ns            | <10      |
| Input Trigger Pulse Impedance                         | load $\Omega$ | 50       |
| Others  |               |          |
| Operation Temperature                                 | °C            | -10-50   |
| Storage Temperature                                   | °C            | -40-105  |
| Product Dimensions                                    | mm            | 44x45x15 |

<sup>1</sup>Part No. = Brand Code - Series - Power - Centroid Wavelength - FOV.

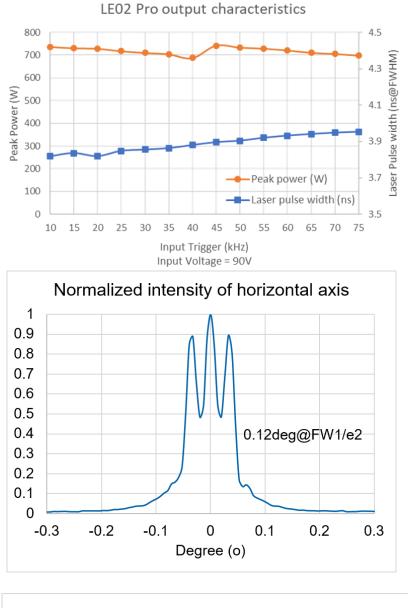
<sup>2</sup> A non-condensing environment is required for storage and operation below ambient dew point.

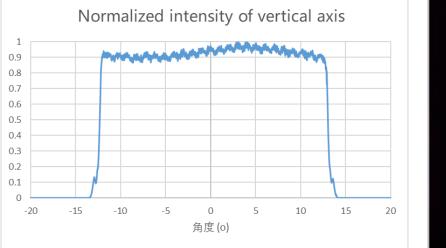


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# Product Test Results (Prototype for LET300035)





Rev 03 | Updated February 20, 2024

Focuslight Technologies Inc.