

# Picking the Right Diode Laser Manufacturer for 3D Sensing

## THE THREE ESSENTIALS

Diode lasers are everywhere: networking systems, telecommunications, even under the ocean. Field failures can immobilize everything—no calls, no files transferred, no gesture-controlled games, no images downloaded. Finding the right diode laser manufacturer is crucial in maintaining uninterrupted systems.

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### PROVEN RELIABILITY

Lumentum has mastered the art of manufacturing extremely reliable diode lasers.

Through our expert design efforts, vertical integration, and in-depth product data, we have recorded zero, that's right zero failures for undersea cabling and also zero field failures for consumer applications.

DIODE LASERS FOR UNDERSEA COMMUNICATIONS

150,000

TOTAL VOLUME

1 BILLION

ZERO

FIELD FAILURES

ZERO

25yr

LIFE REQUIRED

5yr

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### QUALITY AT SCALE

High-volume manufacturing is easy; high-volume manufacturing with high-quality isn't.

Leveraging our manufacturing sites and our partners (who must meet our stringent requirements), we achieve consistently high and predictable yields for our customers—year after year.

INDUSTRIAL APPLICATIONS

50,000/year

TELECOM

500,000/year

CONSUMER ELECTRONICS

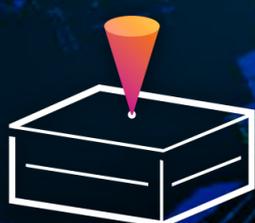
>250 million/year

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### EXPERT GUIDANCE

Our broad product portfolio enables us to provide unmatched support to system designers.

It's perplexing: single-mode or multimode? Which wavelength—800 nm, 850 nm, 940 nm, 1400-1550 nm? Is one power level better than another? What about eye safety compliance? We work with you impartially and collaboratively to make the best choice.



VCSELS

- Narrow bandwidth: <1 nm
- Power range: 200 mW – scalable to 100s of watts
- Output beam: circular
- Wavelength locking with temperature



DFB EDGE EMITTERS

- Narrow bandwidth: <1 nm
- Power range: 200 mW – scalable to 10s of watts
- Output beam: elliptical
- Wavelength locking with temperature



FABRY-PEROT EDGE EMITTERS

- Wide bandwidth: >1 nm
- Power range: 200 mW – scalable to 10s of watts
- Output beam: elliptical
- The most efficient solution



For more information, read our in-depth white paper: **Diode Lasers in Next-Generation 3D Sensing Applications: Meeting the Challenges of Reliability and Scale.**