

# **North America Quantum Cascade Laser (QCL) Market 2021-2031 by Fabrication Technology (Fabry–Perot, Distributed Feedback, Tunable External Cavities), Operation Mode (Continuous Wave, Pulsed), Packaging Type (C-Mount, HHL & VHL, TO3), Industry Vertical, and Country: Trend Forecast and Growth Opportunity**

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## **Abstracts**

North America quantum cascade laser (QCL) market is projected to grow by 3.4% annually in the forecast period and reach \$214.5 million by 2031, driven by the increasing the use of quantum cascade lasers in gas sensing and chemical detection applications, and growing demand for quantum cascade lasers in healthcare and other industrial applications.

Highlighted with 20 tables and 37 figures, this 86-page report “North America Quantum Cascade Laser (QCL) Market 2021-2031 by Fabrication Technology (Fabry–Perot, Distributed Feedback, Tunable External Cavities), Operation Mode (Continuous Wave, Pulsed), Packaging Type (C-Mount, HHL & VHL, TO3), Industry Vertical, and Country: Trend Forecast and Growth Opportunity” is based on a comprehensive research of the entire North America quantum cascade laser (QCL) market and all its sub-segments through extensively detailed classifications. Profound analysis and assessment are generated from premium primary and secondary information sources with inputs derived from industry professionals across the value chain. The report is based on studies on 2019-2021 and provides forecast from 2022 till 2031 with 2021 as the base year. (Please note: The report will be updated before delivery so that the latest historical year is the base year and the forecast covers at least 5 years over the base year.)

In-depth qualitative analyses include identification and investigation of the following aspects:

Market Structure

Growth Drivers

Restraints and Challenges

Emerging Product Trends & Market Opportunities

Porter's Fiver Forces

The trend and outlook of North America market is forecast in optimistic, balanced, and conservative view by taking into account of COVID-19 and Russia-Ukraine conflict. The balanced (most likely) projection is used to quantify North America quantum cascade laser (QCL) market in every aspect of the classification from perspectives of Fabrication Technology, Operation Mode, Packaging Type, Industry Vertical, and Country.

Based on Fabrication Technology, the North America market is segmented into the following sub-markets with annual revenue (\$ mn) for 2021-2031 included in each section.

Fabry–Perot (FP) Lasers

Distributed Feedback (DFB) Lasers

Tunable External Cavities (TEC) Lasers

Based on Operation Mode, the North America market is segmented into the following sub-markets with annual revenue (\$ mn) for 2021-2031 included in each section.

Continuous Wave Mode

Pulsed Mode

By Packaging Type, the North America market is segmented into the following sub-markets with annual revenue (\$ mn) for 2021-2031 included in each section.

C-Mount Package

HHL & VHL Package

TO3 Package

By Industry Vertical, the North America market is segmented into the following sub-markets with annual revenue (\$ mn) for 2021-2031 included in each section.

Industrial

Healthcare

Telecommunication

Military & Defense

Research & Development

Other Verticals

Geographically, the following national/local markets are fully investigated:

U.S.

Canada

Mexico

For each key country, detailed analysis and data for annual revenue (\$ mn) are available for 2021-2031. The breakdown of national markets by Fabrication Technology, Operation Mode and Industry Vertical over the forecast years are also included.

The report also covers current competitive scenario and the predicted trend; and profiles key vendors including market leaders and important emerging players.

Selected Key Players:

AdTech Optics Inc.

Alpes Lasers S.A.

Block Engineering LLC

Boston Electronics Corporation

DRS Daylight Solutions Inc.

Emerson Electric Corporation

Frankfurt Laser Company

Hamamatsu Photonics K.K.

mirSense SA

Nanoplus Nanosystems and Technologies GmbH

Pranalytica Inc.

Thorlabs Inc.

Wavelength Electronics Inc.

(Please note: The report will be updated before delivery so that the latest historical year is the base year and the forecast covers at least 5 years over the base year.)

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