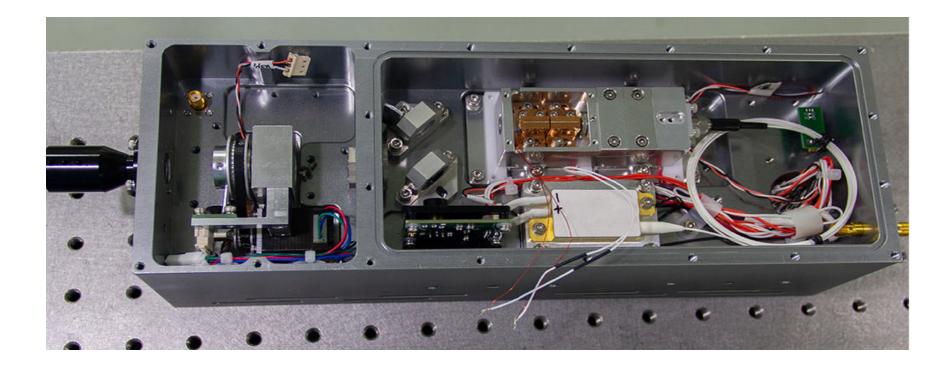
# **1064nm Passive Q-Switched Sub Nanosecond Laser**



## PARAMETERS

| Model                      |                                       | CL1064-120µJ-PQNL007 | CL1064-240µJ-PQNL008 | CL1064-400µJ-PQNL009 |
|----------------------------|---------------------------------------|----------------------|----------------------|----------------------|
| Optical Parameter          | Energy @1064nm (uJ)                   | >120                 | >240                 | >400                 |
|                            | Energy Stability                      | <3%                  | <3%                  | <3%                  |
|                            | Repeat Frequency (Hz)                 | 1~500                | 1~100                | 1~100                |
|                            | Pulse Width (ns)                      | <1.5                 | <1.5                 | <1.5                 |
| Function Parameter         | Control Interface                     | DB9, RS422           | DB9, RS422           | DB9, RS422           |
|                            | Cooling Method                        | Air-cooled           | Air-cooled           | Air-cooled           |
|                            | Powered By                            | 220VAC/50Hz          | 220VAC/50Hz          | 220VAC/50Hz          |
|                            | Output Power (W)                      | <50                  | <80                  | <100                 |
| Environmental Requirements | Operating Temperature ( $^{\circ}C$ ) | 15-40                | 15-40                | 15-40                |
|                            | Storage Temperature (°C)              | -5-60                | -5-60                | -5-60                |
|                            | Humidity                              | 0-80%                | 0-80%                | 0-80%                |
| Weight and Size            | Laser Weight (Kg)                     | <10                  | <12                  | <15                  |
|                            | Laser Size (mm)                       | 441*117*96           | 480*120*96           | 520*120*96           |

#### DESCRIPTION

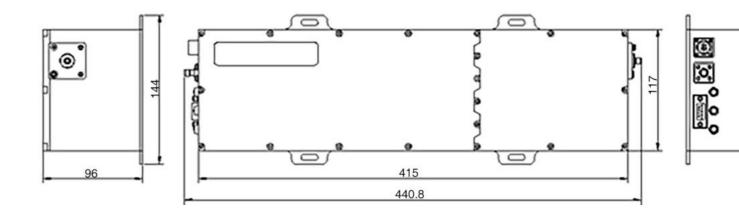
This series of products include active Q-switching and passive Q-switching microchip two technical solutions to generate sub nanosecond optical pulses, output sub nanosecond laser pulses while maintaining excellent beam quality. For the active Q-switched technology, the jitter of the output optical signal and the trigger signal is less than 1 ns, and for the passive Q-switched microchip laser, the jitter of the output signal and the external trigger signal is less than 10 µ s. The laser can be used alone or as seed source of laser amplifier. At the same time, the laser amplifier of our company can be used to amplify the energy to tens of MJ. At the same time, the wavelength can be extended to 532nm, 355nm, 266nm, etc. The product has the advantages of good beam quality, high peak power, reliable performance, compact structure, simple operation and maintenance. Combined with excellent production technology, this series of products can meet the requirements of airborne, vehicle mounted, high and low temperature and other harsh environments.

Main features of this series of lasers:Sub-nanosecond, high peak power;High beam quality;High stability and compact structure; Strong environmental adaptability, working at -20 ~ 60 °C; 1064nm, 532nm, 355nm wavelength optional; Typical application;Lidar;Laser micromachining;Nonlinear spectroscopy;Terahertz generation.

#### **FEATURES**

- Structural design of passive Q-switched microchip
- Narrow pulse width, high peak power
- High stability and compact structure
- Integrated photodetector

## **OUTLINE SIZE(mm)**





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# **APPLICATION**

• Widely used in laser radar, point cloud imaging radar, ranging, laser remote sensing, photoelectric detection, laser fine processing and other fields.