

### Key Features

- Laser linewidth: 10 GHz
- High energy up to 250 mJ
- Output power up to 25 W
- PRF from 100 Hz to 2 kHz
- Pulse width: 250  $\mu$ s to 10ms
- Beam quality  $M^2 < 1.1$
- PER: 20 dB
- RS 232 or USB interface
- Operation Temp: 0 to 50° C

The CYBEL BEACON-1064 is a quasi CW ( QCW ) 25W pulsed fiber laser at 1064nm. This laser delivers pulses from 250  $\mu$ s to 10 ms over a wide range of repetition rates from 100 Hz to 2 kHz.

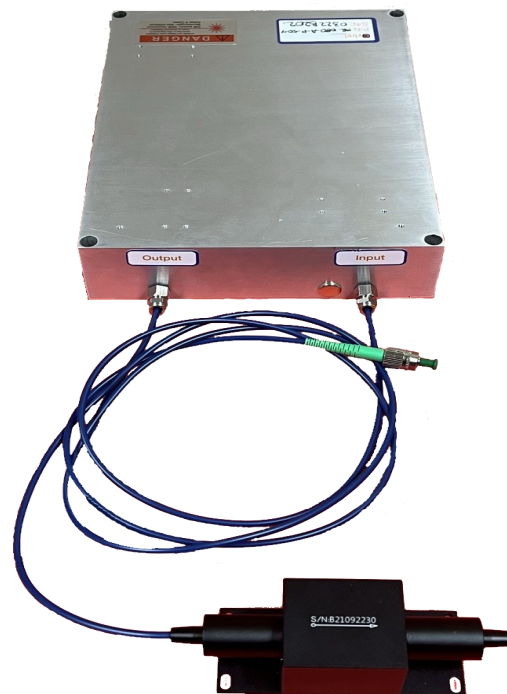
The **BEACON-1064** is an efficient and compact OEM unit ( 200x150x43mm<sup>3</sup> ) in either standard or PM fiber. Its robust design has been battle-tested for airborne or ground sensing applications. undergone environmental testing

This laser output power and key operating parameters are controlled from either an RS-232 or USB port. The pulses are triggered by either an external TTL input signal or internal software command.

### Applications

- LIDAR-LADAR
- Range finding
- Airborne Mapping
- Remote sensing
- Non linear optics conversion

### BEACON-1064 25W QCW Laser



### BEACON SERIES

Available at different standard wavelengths with same high performance and compact footprint:

- ◆ BEACON-1550
- ◆ BEACON-2000

# BEACON-1064 Specifications

| OPTICAL                               | Unit            | Min        | Max  | Comments                                   |
|---------------------------------------|-----------------|------------|------|--------------------------------------------|
| Mode of Operation                     |                 | Pulsed     |      |                                            |
| Wavelength                            | nm              | 1064       |      | Other λs Available: 1030 nm, 1080 nm       |
| Linewidth                             | GHz             | 10         |      | MHz Linewidth Available up to 10 W         |
| Repetition Rate                       | Hz              | 100        | 2000 | Adjustable                                 |
| Pulse Width                           | μs              | 250        | 5000 | Adjustable                                 |
| Output Peak Power                     | W               | 25         |      |                                            |
| Output Energy/Pulse                   | mJ              | 10         | 250  |                                            |
| Average Output Power                  | W               | 5          |      |                                            |
| Output Power Tunability               | %               | 10 - 100   |      |                                            |
| Polarization Ext. Ratio (PER)         | dB              | 20         |      | PM Version                                 |
| Output Beam Quality (M <sup>2</sup> ) |                 | 1.1        |      | Diffraction Limited                        |
| Signal to Noise Ratio (OSNR)          | dB              | 45         |      | OSA Res. = 0.1nm                           |
| Output Power Stability (RMS)          | %               | 3          |      | After 20 Min Warm-Up Time                  |
| Output Fiber Length                   | m               | 1          |      | FC/APC Connector                           |
| Output Isolation                      | dB              | 20         |      | Optional                                   |
| Connector                             |                 | FC/APC     |      | Other Connectors and Collimators Available |
| <b>ELECTRICAL</b>                     |                 |            |      |                                            |
| Voltage                               | V               | 18 to 30   |      |                                            |
| Warm Up Time                          | min             | 20         |      |                                            |
| Power Consumption                     | W               | 45         |      | @ Pout Max= 5 W                            |
| Control Interface                     |                 | RS-232     |      |                                            |
| Mode of Operation                     |                 | ACC        |      |                                            |
| <b>GENERAL</b>                        |                 |            |      |                                            |
| Dimensions                            | mm <sup>3</sup> | 200x150x43 |      | W/O Heat Sink                              |
| Storage Temperature                   | °C              | -10 to 70  |      |                                            |
| Operating Case Temp.                  | °C              | 10 to 50   |      |                                            |
| Humidity                              | %               | 5 to 95    |      | Non Condensing                             |

## CUSTOMIZATION

The **Beacon** a laser platform that can be customized to match Customers' specific requirements. Please contact Cybel.

**COMPLIANCE with Regulatory Requirements:** These OEM products are Class 4 lasers as designated by the Center for Device and Radiology Health (CDRH). As such they are intended only in integration into other equipment and do not comply with CDRH requirement. It is the customer responsibility for CDRH certification of the full system that incorporates this industrial laser.



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