



BEACON-1550 25 W QCW High Power Fiber Laser

Key Features

- Laser linewidth: 15 MHz
- High energy up to 125 mJ
- Output power up to 25 W
- PRF from 100 Hz to 2 kHz
- Pulse width: 250 μ s - 5 ms
- Beam quality $M^2 < 1.1$
- PER: 20 dB
- RS 232 or USB interface
- Operation Temp: 0 to 50° C

The **CYBEL BEACON-1550** is a Quasi CW (QCW) up to 25 W pulsed fiber laser at 1550 nm. This laser delivers pulses from 250 μ s to 5 ms over a wide range of repetition rates from 100 Hz to 2 kHz.

The **BEACON-1550** is an efficient and compact OEM unit (200x150x43 mm³) 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

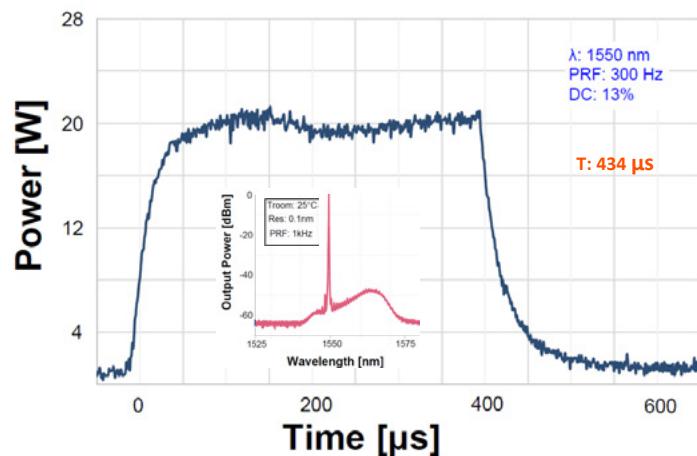
- LIDAR-LADAR
- Range finding
- Airborne Mapping
- Remote sensing
- Non linear optics conversion

BEACON SERIES

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

- ♦ BEACON-1064
- ♦ BEACON-2000

BEACON OUTPUT PEAK POWER



BEACON-1550 Specifications

OPTICAL	Unit	Min	Max	Comments
Mode of Operation		Pulsed		
Wavelength	nm	1550		Other Wavelengths Available
Linewidth	MHz	15		
Repetition Rate	Hz	100	2000	Adjustable
Pulse Width	µs	250	5000	Adjustable
Output Peak Power	W	25		
Output Energy/Pulse	mJ	10	125	
Average Output Power	W	5		
Output Power Tunability	%	10 - 100		
Polarization Ext. Ratio (PER)	dB	20		PM Version
Output Beam Quality (M²)		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
ELECTRICAL				
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		
GENERAL				
Dimensions	mm³	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.

