LDP-1064NM-800MW

1064nm, 800mW DFB Source with User Adjustable Pulses from 1 Nanosecond to CW

Optimized for Pulsed Fiber Laser and Frequency Conversion Applications

Includes 1064nm DFB Laser Diode Source + Pre-Configured Control Electronics & Mounting Module

Built-In Pulse Generator
( Also Accepts External Trigger )

USB Interface, Includes Programming Tools Software Suite, DLL Library and GUI
SPECIFICATIONS

1064NM DFB LASER DIODE OPTICAL OUTPUT SPECIFICATIONS:
Adjustable Pulse Width Range: 1 Nanosecond to CW
Center Wavelength: 1064 nm (+/-2nm)
Pulsed Peak Output Power: 800 mW
CW Output Power (typ): 200 mW
SMSR (<10ns pulse width): > 25 dB
Spectral Width (FWHM @ 100ns Pulse Width): 200 kHz (typical)
Duty Cycle Range: < 5%
Integrated DFB Laser Diode: ii-vi Laser Enterprise CMDFB1064A

CONTROL ELECTRONICS AND MOUNTING MODULE
PULSED AND CW ELECTRONICS SPECIFICATIONS:
On-Board Generator Pulse Width Range: 0.5 nanoseconds - 500 nanoseconds
External Trigger Pulse Width Range: 0.5 nanoseconds - CW
Internal Pulse Generator Adjustment Precision: 10 picoseconds
Optical Pulse Jitter: < 1 nanosecond
On-Board Pulse Generator Repetition Rate Range: 1Hz - 4MHz (250 MHz w/ HPP Option)
Output Current Pulsed Mode: 0.00 mA - 1.50 Amps
Output Current CW Mode: 0.00 mA - 800.00 mA
Output Voltage Maximum: 4.8 Volts
Current Noise and Ripple (100Hz to 10 MHz): < 0.03% of Full Scale
Current Set-point Resolution @ 500mA: 0.1 mA
Current Set-point Resolution @ 1000mA: 0.3 mA

CONTROL ELECTRONICS AND MOUNTING MODULE
TEMPERATURE CONTROLLER & MOUNTING SOCKET SPECIFICATIONS:
TEC Current Range: 0.0 - 1.5 Amps
TEC Voltage Range: 0.0 - 3.8 Volts
TEC Controller Compatible with NTC Thermistors: 1kΩ - 100 kΩ
Mounting Socket Base Material: Anodized Aluminum
Mounting Socket Technology: Zero Insertion Force Socket
SPECIFICATIONS

USER INTERFACE, DIMENSIONS AND POWER INPUT:
Interface: USB
OS Compatibility: Windows XP / Windows 7
Control Software: Control Software - Windows GUI Included
Input Power Supply: 12VDC (220V/110V adapter included)
Module Dimensions: 146mm (W) x 130mm (L) x 37mm(H)
Libraries: DLLs - Hexa/Linux - Labview - Python
Analog Interface (0-3.3V): Peak Power Adjustment

OPTIONS:
HPP (High Pulse Performance) Technology: See Details Below
Output Isolator
Polarized Fiber (single-mode only)
Narrow emission bandwidth
Separated collimator
Customer Specified Connectors (FC, SMA)

OPTIONAL HPP (HIGH PULSE PERFORMANCE) TECHNOLOGY:
Price: Additional $6,500
< 8ps Jitter
Up to 250MHz Repetition Rate (no recovery time)
Up to 3500mA max Current
Configurable Offset Current Under Pulse

DFB LASER DIODE FIBER AND CONNECTOR:
Fiber Type: PM, Polarization Maintaining
Mode Field Diameter: 6 um
Buffer Diameter: 250 um
Fiber Length: 1 meter
Connector: FC/APC, PM Aligned to Slow Axis
Pulsed Laser Diode Driver with Integrated TEC Controller & Butterfly Mounting Socket

INTEGRATED LASER DIODE
1064nm DFB Laser Diode Model CMDFB1064A from II-VI

- For Fiber Laser and Frequency Conversion Applications
- 1064nm (+/-2nm) DFB
- PM Fiber, FC/APC
- 10-Pin Butterfly
- Internal TEC Cooler
- Internal Monitor PD
- Lateral and Longitudinal Single Mode in Short Pulse Operation

Integrated DFB Laser Diode: ii-vi Laser Enterprise CMDFB1064A
3 NANOSECOND PULSE  
Example at Peak Laser Diode Power 290mW  
1064nm DFB Laser Diode Model CMDFB1064A from II-VI

1064nm, 800mW DFB Source with User Adjustable Pulses from 1 Nanosecond to CW

GRAPHICAL USER INTERFACE

Simple User Interface:
- Peak Pulse Current
- Maximum Average Current
- Pulse Width
- Pulse Frequency
- Pulse Current Source (Ext or Int)
- Pulse Trigger Source (Ext or Int)
- Offset Current
- Laser Diode Temperature
- Control Mode: CW or Pulsed
- Laser Diode Output ON/OFF

USB Interface, Includes Programming Tools Software Suite, DLL Library and GUI
PRODUCT SALES AND SERVICE:
Orders for this product are fulfilled by Laser Lab Source in North America and select international regions. It is manufactured by Aerodiode, Talence, France.

PRODUCT WARRANTY:
This product is sold with a full one year warranty. It is warranted to be free from defects in material and/or workmanship for a period of one year from the date of shipment.

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