

# TEMPRETURE-STABILIZED LIGHT SOURCE/PUMP LASER SYSTEM

(635nm, 650nm, 670nm, 685nm, 850nm, 980nm, 1310nm, 1480nm, 1550nm...)



## Product Descriptions

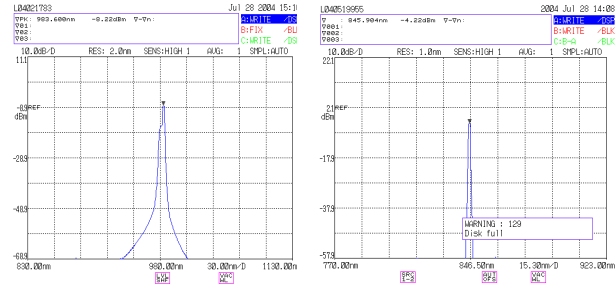
With on high accuracy automatic power control (APC) and automatic temperature control (ATC) technologies, PHOTONIK configures plug & play stabilized light sources or turnkey pump laser systems delivering super-stable output power and center wavelength in both short term and long term. These light sources can work at CW mode, internal modulation mode, and external modulation modes. The application covers in optical fiber sensor, optical testing, optical components manufacturing environment and testing, general R&D purpose in laboratories.

## Key Features

- \* Full range of LD/LED types and wavelengths are available
- \* High stability of output power and center wavelength
- \* Options with internal and/or external modulation

## Main Applications

- \* Optical fiber component manufacture & test
- \* Optical communication system test



## General Specifications

| LD Type<br>Parameter              | LD/LED Multimode  | LED/SLED Singlemode          | LD(FP, DFB, VCSEL) Singlemode                             |
|-----------------------------------|---|------------------------------|---|
| Emission Band                     | 635/650/670/685/850/915/980<br>1300/1310/1480/1550/1610nm             | 850/980nm<br>1310/1550nm etc | 635/650/670/685/850/915/980<br>1300/1310/1480/1550/1610nm |
| Central Wavelength(nm)            | Per user specified  | Per user specified           | Per user specified  |
| Spectrum Width(-3dB) (nm)         | < 5 typ.  | > 30 typ.; 120 max           | < 5 typ(LD); <0.5(-20dB)(DFB)                             |
| Output Power(mW)                  | > 1   | > 0.02 Min                   | > 1 typ.; 400mW Max                                       |
| Short-Term Stability <sup>1</sup> | < ± 0.02dB over 15 min  |                              |   |
| Long-Term Stability <sup>2</sup>  | < ± 0.10dB over 8-hrs   |                              |   |
| Output Attenuation(dB)            | 0 ~ 5.9 ( ± 0.5), at 0.1dB step                                       |                              |   |
| Operating Mode                    | CW Standard; Optional: Internal Modulation and/or External Modulation |                              |   |
| Internal Modulation(Digital)      | Optional Part: Square wave at 270Hz, 1kHz, 2kHz (occupancy 50 ± 10%)  |                              |   |
| External Modulation               | Optional Part: Digital, analog (DC~10MHz, TTL level, BNC connector)   |                              |   |
| Fiber Pigtail Type                | Multimode Fiber   | Singlemode Fiber             | Singlemode Fiber  |
| Output Connector                  | FC/UPC, FC/APC, SMA, or No connector                                  |                              |   |
| Operating Temperature             | 0°C ~ 40°C  |                              |   |
| Storage Temperature               | -20°C ~ 70°C  |                              |   |
| Power Supply                      | AC 220V±10%, 50Hz, 20W  |                              |   |
| Dimensions (LxWxH)                | Benchtop: 280mm × 260mm × 112mm; Or per special request               |                              |   |

**Remarks:** Stability is tested at room temperature 23 ± 2°C after pre-heating of 60 minutes.

1. Test condition: fixed temperature, CW.
2. Test condition: temperature variation ±2°C, CW.

Specifications on center wavelength, output power, attenuation range, control mode or interface, etc. can be configured per customer request.

## Ordering Information

**Users may specify:**

1: LD/LED type; 2: Center Wavelength; 3: -3dB Bandwidth; 4: Output Power; 5: Fiber Type; 6: Casing Type; 7: Modulation Options; 8: Connector Type;



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