

LD/LED Light Source Measurement System

BIX-8801 Series

Laser Diodes (LDs) and Light-Emitting Diodes (LEDs) represent the most prevalent semiconductor light sources, finding extensive applications across both industrial and scientific research fields. Their optical characteristics - particularly spectral properties and power output metrics - constitute the most critical performance parameters. The BIX-8801 provides a complete solution for characterizing semiconductor light sources (LDs/LEDs), integrating:

- Precision driving (current & temperature control)
- Optical coupling (sample mounting & light collection)
- Comprehensive detection (spectral & power measurement)



Features

1. Multi-parameter Driver System

- Programmable current sources (multiple ranges available)
- Peltier-based temperature control
- Integrated device mounting fixtures

2. Advanced Optical Characterization

- Simultaneous spectral analysis (200-1700nm)
- Optical power measurement (nW to W level)
- Automated parameter correlation

3. Unified Software Platform

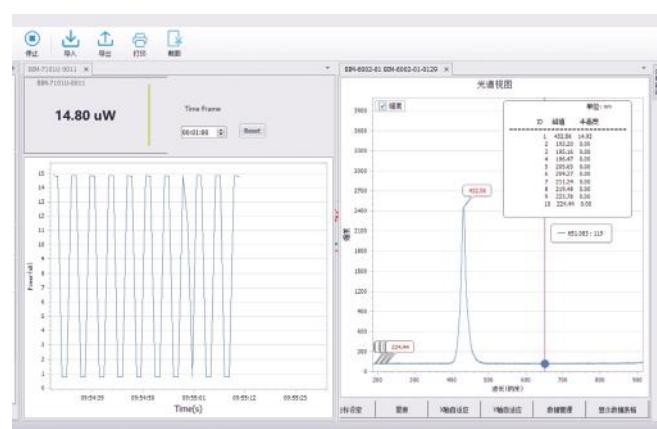
- Brolight data acquisition interface
- Real-time plotting of L-I-V-T characteristics
- Spectral/power vs. drive condition analysis

Applications

Laser diode threshold current testing

- LED spectral shift analysis
- Temperature-dependent efficiency studies
- Device reliability evaluation

Typical Spectrum



LD power and spectrum

Specifications

| Module | Model | Specifications | | | |
|------------------------------|----------------|---|--------------------|--------------------|---------------|
| Current Drive Controller | BRM-6101 | Mode: CW/Pulse Current: 1.5A | | | |
| | BRM-6102 | Mode: CW/Pulse Current: 15A | | | |
| | BRM-6103 | Mode: CW Current: 20A | | | |
| | BRM-6104 | mode : CW current: 1A | | | |
| Temperature Drive Controller | BRM-6201 | Current: ±4A Voltage: ±21V | | | |
| | BRM-6202 | Current: ±16A Voltage: ±30V | | | |
| Installation Mounts | BRM-6701 | Pacakge type: TO-Can Support specification: TO-38/46/56/90 | | | |
| | BRM-6711 | Pacakge type: Butterfly shape Support specification: 14Pin | | | |
| Integrating Sphere | SIM-3001-10001 | Sphere dia: 100mm | | | |
| | SIM-3001-15001 | Sphere dia: 150mm | | | |
| Power Meter | BIM-7101U | Wavelength range: 380~1100nm | | | |
| | BIM-7102U | Wavelength range: 200~1100nm | | | |
| | BIM-7103U | Wavelength range: 800~1650nm | | | |
| Module | Current Drive | Tempertaure Drive | Installation Mount | Integrating Sphere | Power Meter |
| Configuration | 00: no | 00: no | 00: no | 00: no | 00: no |
| | 01: BRM-6101 | 01: BRM-6201 | 01: BRM-6701 | 01: SIM-3001-10001 | 01: BIM-7101U |
| | 02: BRM-6102 | 02: BRM-6202 | 02: BRM-6711 | 02: SIM-3001-15001 | 02: BIM-7102U |
| | 03: BRM-6103 | | | | 03: BIM-7103U |
| | 04: BRM-6104 | | | | |
| BIX-8801 | 01 | 01 | 00 | 02 | 03 |

*Spectrometer and optical fiber are configured as needed.