QUANTIFI PHOTONICS®



SLED

1000 SERIES BROADBAND OPTICAL SOURCE

SPECIFICATION SHEET

AVAILABLE IN PXIE

AVAILABLE IN MATRIQ

quantifiphotonics.com

Quantifi Photonics' SLED 1000 Series is ideal for helping you build a customized optical testing platform and deliver reliable and repeatable results in manufacturing or research and development environments.

The SLED comes in various wavelength models to address various key applications such as the telecom and datacom markets.



Large bandwidth

The large spectral bandwidth brings you a short coherence length for high resolution inteferometry and optical coherence tomography.

Various wavelength ranges

With a choice of multiple wavelength ranges you can find the model that fits in with your wavelength of interest.

Stable wavelength spectrum output

Broad and smooth spectral profile enables consistent testing across a wide range of wavelengths.



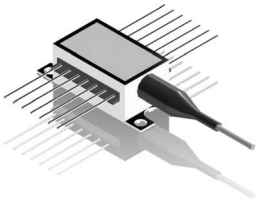
Fully programmable

Plug and play with USB or Ethernet connectivity; Controllable via the web-based GUI, COHESIONUI, LabVIEW or SCPI commands.

Compact

Up to four channels per PXIe slot, or available with up to four channels in the compact benchtop MATRIQ version.

Define your broadband source requirements



The SLED 1000 Series is a versatile platform can be customized with a range of super luminescent sources. For a quote and lead time on a customized SLED 1000 instrument please contact our sales engineers at sales@quantifiphotonics.com

Please include the following information:

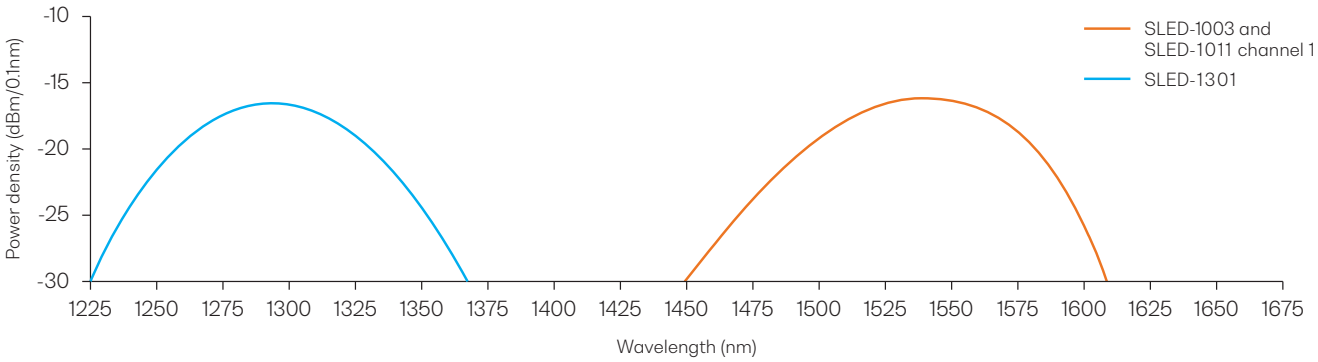
- **Wavelength range** (from xx nm to xx nm)
- **Output power** (from xx dBm to xx dBm)
- **Total number of channels**
- **Channels per instrument** (1, 2 or 4)
- **Connector type** (FC/PC, FC/APC, SC/PC, SC/APC)
- **Form factor** (PXI or MATRIQ)

APPLICATIONS

- Broadband source for component spectral characterization
- White light interferometry
- Broadband noise source for stress tests
- Optical coherence tomography

MODEL SELECTION

Choose from a combination of wavelength ranges and output powers. If you do not see a model that matches your requirements please contact us to discuss customization.



CHOOSE YOUR FORM FACTOR

PXIe – MODULAR

Our expanding range of PXIe optical test solutions are used by customers in mixed-signal test and measurement systems, reducing complexity, lowering the cost of test and accelerating time to market.

- Multi vendor, open standard with over 2500 PXI modules available
- Advanced timing and synchronization capabilities across instruments
- Low latency, high performance processing and fast data throughput
- Design and build scalable, high channel count systems
- Small footprint and lower power consumption



MATRIQ – COMPACT & PORTABLE

The MATRIQ series provides the same high-performance test capabilities of our PXIe modules in an compact benchtop design. MATRIQ instruments are simple to setup and easy to operate, making them the perfect choice for your optical lab or test bench.

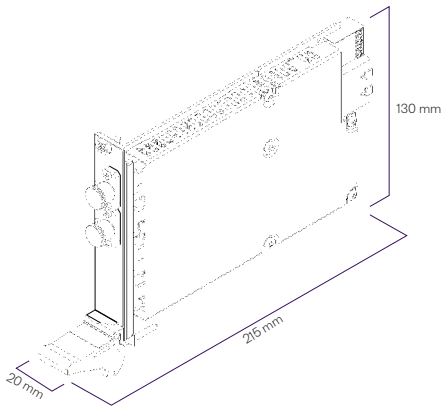
- Same performance and control as our PXIe modules
- Plug and play with USB or Ethernet connectivity
- Control via the web-based GUI, COHESIONUI or SCPI commands
- Compact and portable design saves benchtop space



PXI



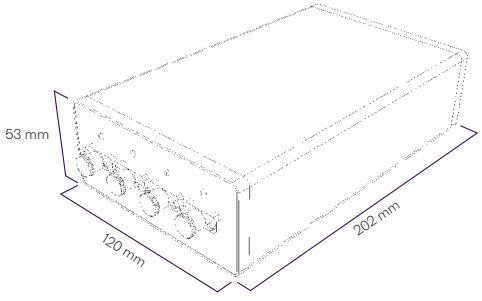
SLED-1003-2-FC-PXIE

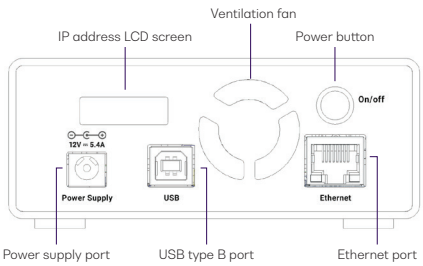


MATRIQ



SLED-1003-4-FC-MTRQ





SLED TECHNICAL SPECIFICATIONS

General Specifications	PXI	MATRIQ
Bus connection	PXIe	USB and ethernet
Slot count	1	-
Optical connector type	FC/PC, FC/APC, SC/PC and SC/APC	FC/PC, FC/APC, SC/PC and SC/APC
Number of channels	**1003, 1301:** 1, 2 or 4 **1011:** 2	**1003, 1301:** 1, 2 or 4 **1011:** 2
Dimensions (HxWxD)	130 x 20 x 215 mm | 5.1 x 0.8 x 8.5 inches	53 x 120 x 202 mm | 2.1 x 4.7 x 8.0 inches
Weight	~1 kg | ~2.2 lbs	~1.1 kg | ~2.4 lbs
Operating temperature range	5°C to 45°C | 41°F to 113°F	5°C to 45°C | 41°F to 113°F
Storage temperature range	-40°C to 70°C | -40°F to 158°F	-40°C to 70°C | -40°F to 158°F

Power Specifications	PXI	MATRIQ
AC input voltage range	Please refer to the latest PXI Express Hardware Specifications published by the PXI Systems Alliance.	90 to 264 VAC
AC input current		1.3A (115Vac), 0.9A (230Vac)
AC frequency range		47 to 63 Hz
DC output voltage		12V
DC output current max		5.41A
Dimensions (LxWxH)		4.58 x 2.06 x 1.23" (116.3 x 52.4 x 31.3 mm)

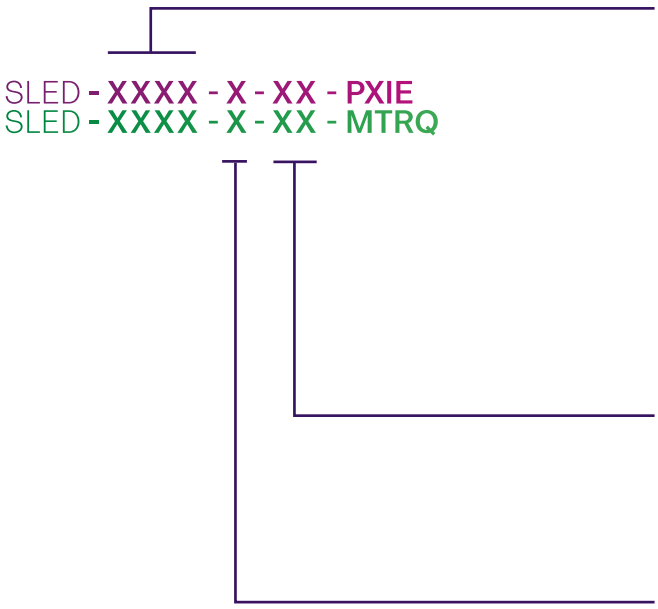
SLED TECHNICAL SPECIFICATIONS

Model Number	1003	1003
Wavelength range	1510 to 1590 nm	1510 to 1590 nm
Center wavelength	1550 nm	1550 nm
Center wavelength accuracy	± 10 nm	± 10 nm
Output power	12 dBm	12 dBm
Full width at half max	80 nm	80 nm
Fiber type	SMF-28	SMF-28
Power spectral density	> -12 dBm/nm Typical	> -12 dBm/nm Typical
Laser saftey class	1M	1M

Model Number	1011	1011
Wavelength range	**Channel 1**: 1510 to 1590 nm **Channel 2**: 1280 to 1340 nm	**Channel 1**: 1510 to 1590 nm **Channel 2**: 1280 to 1340 nm
Center wavelength	**Channel 1**: 1550 nm **Channel 2**: 1310 nm	**Channel 1**: 1550 nm **Channel 2**: 1310 nm
Center wavelength accuracy	± 10 nm	± 10 nm
Output power	**Channel 1**: +12 dBm **Channel 2**: +11 dBm	**Channel 1**: +12 dBm **Channel 2**: +11 dBm
Full width at half max	**Channel 1**: 80 nm **Channel 2**: 60 nm	**Channel 1**: 80 nm **Channel 2**: 60 nm
Fiber type	SMF-28	SMF-28
Power spectral density	**Channel 1**: > -12 dBm/nm Typical **Channel 2**: > TBDm Typical	**Channel 1**: > -12 dBm/nm Typical **Channel 2**: > TBDm Typical
Laser saftey class	1M	1M

Model Number	1301	1301
Wavelength range	1260 to 1330 nm	1260 to 1330 nm
Center wavelength	1300 nm	1300 nm
Center wavelength accuracy	± 10 nm	± 10 nm
Output power	10 dBm	10 dBm
Full width at half max	60 nm	60 nm
Fiber type	PMF	PMF
Power spectral density	> -8 dBm/nm Typical	> -8 dBm/nm Typical
Laser saftey class	1M	1M

ORDERING INFORMATION



Model number

1, 2 or 4 channels:

1003 = SLED with 1550 nm center wavelength
1301 = SLED with 1300 nm center wavelength

2 channels only:

1011 = SLED with 1550 nm center wavelength (channel 1) and 1310 nm center wavelength (channel 2)

Connector type

FC = FC/PC
FA = FC/APC
SC = SC/PC
SA = SC/APC

Number of channels

1 = 1 channel
2 = 2 channels
4 = 4 channels

WARRANTY INFORMATION

This product comes with a standard 1 year warranty.

EXTENDED WARRANTIES AND CALIBRATION PLANS

With an **extended warranty and calibration plan** you'll spend more time focused on your priorities and less time worrying about maintenance.



Your choice: add a **3 or 5 year extended warranty** when you buy.

Guarantee peak performance

Ensure your equipment is operating at the best it can be for reliable and accurate results.

Lower cost of ownership

Lock in savings and maximise your testing budget with a lower base cost of ownership.

Peace of mind

Spend less time worrying about maintenance and more on generating results.

CALIBRATION PLANS FOR ADDITIONAL DISCOUNTS

Order a **calibration plan** when purchasing your Quantifi Photonics instruments and get additional discounts.

10% Discount On calibrations ordered at the time of purchase.

25% Discount Add on an extended warranty and receive a 25% discount on calibrations.

Over time and with regular use, all optical parts and connectors require re-calibration and maintenance to guarantee accurate and reliable performance. We recommend Quantifi Photonics optical instruments are re-calibrated every 12 months.

With an instrument calibration performed by Quantifi Photonics technicians you receive:

- Comprehensive calibration to factory specifications
- End-to-end inspection to ensure all instrument functions are working and connectors are clean
- Firmware, software and documentation updates
- Certificate of calibration which includes detailed test results

How to do I **secure my extended warranty or calibration plan**?

Contact your Quantifi Photonics sales representative or email **sales@quantifiphotonics.com**

Extended warranties and calibration plans must be ordered at the time of purchase and are available only for Quantifi Photonics' products. The 25% calibration discount only applies to calibrations while the product is covered by the extended warranty period.

Our portfolio of optical & electro-optical test modules is rapidly expanding to meet a wide range of customer requirements and applications.

Tunable Laser Sources

Versatile telecom laser sources with full tunability across C or L bands. Narrow 100 kHz linewidth, up to 16.5 dBm of power, optional whisper mode to disable frequency dither.



Fixed Wavelength Laser Sources

Highly customizable laser platform. Select required wavelength, power and fiber type for a customized solution.



Swept, Tunable Continuous Wave Laser

Swept, tunable continuous wave (CW) laser source with 0.01 dB power stability and 400 nm/s high-speed scan rate for R&D and production testing.



Superluminescent Diode Broadband Light Source

Super-luminescent LED light source with high output power, large bandwidth and low spectral ripple and various wavelengths.



Optical-to-Electrical Converter

High bandwidth, broadband O-to-E converter. Available in a range of configurations; choose from 1 or 2 channels, AC or DC coupling and various conversion gain and operating wavelength ranges.



Variable Optical Attenuator (VOA)

Fast attenuation speed with low insertion loss and built-in power monitoring. Operates in fixed attenuation or constant output power modes. Models support SMF, MMF and PMF connector types.



Polarization Controller & Scrambler

High-speed automated polarization control with broad wavelength coverage from 1260nm to 1650nm, low insertion loss and back reflection. Full remote control via intuitive GUI, LabVIEW or SCPI.



Optical Power Meters

Fast terminating or inline monitoring of optical signal power from -60 to +10 dBm across 750 – 1700 nm wavelengths. Model with logarithmic analog output for applications such as silicon photonics fiber alignment.



Bit Error Rate Tester (BERT)

4 or 8-channel Pulse Pattern Generator and Error Detector at rates up to 29 Gbps for the design, characterization and production of optical transceivers and opto-electrical components.



Optical Spectrum Analyzer (OSA)

Cost-effective, spectral measurement in a compact module with built-in analysis for: SMSR, OSNR & spectral width. Targeted wavelengths for specific applications in O band, C band & L band.



Passive Component Integration

Integrate passive optical components of your choice such as WDM couplers, splitters, band-pass filters, PM beamsplitters and circulators. Models support SMF, MMF and PMF.



Passive Component Storage

Protect and store your own passive fiber optic components such as splitters, connector adaptor patchcords, WDM couplers, and isolators in one handy module.



Photonic Doppler Velocimeter (PDV)

Purpose-built module for Photonic Doppler Velocimetry (PDV). A circulator, two VOAs and a passive coupler all built into one compact module.



Optical Switch

Proven reliability and fast switching time. Wide variety of switch onfigurations: 1x4, 1x16, 16x16 and more. Models support SMF, MMF and PMF.



PXI – MODULAR SYSTEM | MATRIQ – COMPACT BENCHTOP

See our website for more details

quantifiphotonics.com/products

Test. Measure. Solve.™

Quantifi Photonics is transforming the world of photonics test and measurement. Our portfolio of optical and electrical test instruments is rapidly expanding to meet the needs of engineers and scientists around the globe. From enabling ground-breaking experiments to driving highly efficient production testing, you'll find us working with customers to solve complex problems with experience and innovation.

To find out more, get in touch with us today.

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