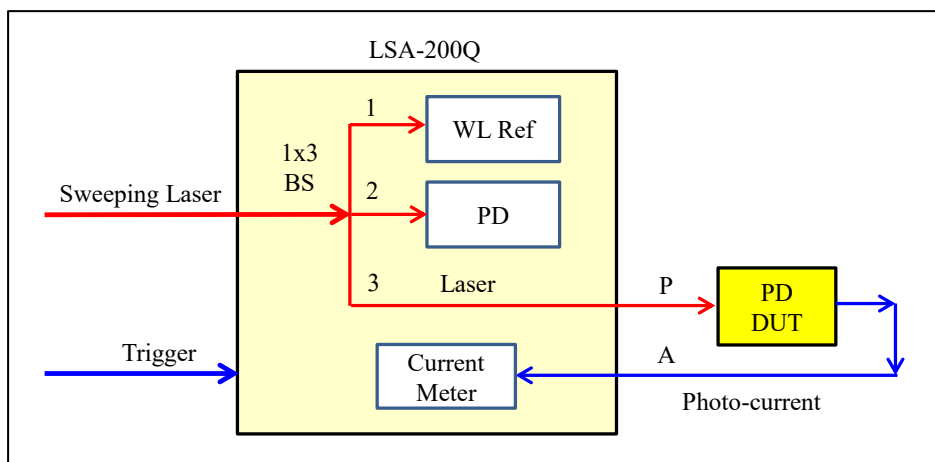


Laser Scan Analyzer (LSA-200Q)



GouMax **Laser Scan Analyzer** (LSA) products are multi-function power meter modules. They are called "Laser Scan Analyzer" because LSA modules are usually used in various applications to measure powers in conjunction with laser scanning/sweeping. GouMax's LSA-200 modules are designed to allow the users to build their own automatic data collection/analysis systems by using their existing tunable lasers or GouMax TLS-1000/TLS-1200 tunable light sources. This lightweight measurement system can simultaneously test multiple devices at high speed with superior spectral resolution and high dynamic range. The LSA modules are aimed for fully utilizing the testing capacity of the tunable laser source and has significantly enhanced the production throughputs in manufacturing floor.

LSA-200Q module is used to measure the responsivity of photo-detectors (PD). As exemplified in figure below, the laser beam with referenced power is inputted to a PD under test (DUT). The generated photo-current is directed to LSA-200Q current meter. Within sub-second, the full spectra of laser power and photo current as a function of wavelength are acquired, from which the responsivity (A/W) is calculated. To fulfill many varieties of customer's applications, LSA module provides Dynamic Link Library (DLL) that allows users to build their own control software while dynamically accessing acquisition data.



Laser Scan Analyzer (LSA-200Q)

Key Features

- High-speed PDR analyzer
- Wide wavelength coverage
- Real-time power reference
- Dynamic Link Library (DLL)

Key Applications

- PD responsivity measurement
- Production line automation
- Test and measurement instruments

LSA-200Q Specifications and Key Parameters

Parameter	Unit	Specification
Operating Wavelength Range ¹⁾	nm	1250 ~ 1650
Input Laser Power	dBm	< 0.0
Wavelength Accuracy	pm	± 50
Wavelength Repeatability ^{2), 3), 4)}	pm	10
Measurement Dynamic Range ⁵⁾	dB	40
Power Measurement Uncertainty ^{3), 4)}	dB	<± 0.05
Power Measurement Resolution ^{3), 4)}	dB	0.005
Power Measurement Repeatability ^{2), 3), 4)}	dB	<± 0.04
PD Responsivity Accuracy	%	±2,5
PD Responsivity Repeatability	%	±1
Noise Floor	dBm	< -65
BNC “Trigger In”	V	3.1 ~ 5.0
Electrical Connector of Spectrum In	-	TB3M
Optical Connector (Laser Input)	-	FC/APC
Optical Connector (Output)	-	FC/UPC
Operating Temperature Range	°C	15 ~ 35

Notes:

- 1) Determined by tunable laser sweeping wavelength range.
- 2) Measurement over 10 hours at temperature 25±1°C.
- 3) Laser power to Spectrum-In is > -10 dBm at temperature 25±1°C.
- 4) Measured at sweep speed 120 nm/s.
- 5) Laser power to Laser Input port is at 0 dBm.