

# Swept Spectrum Analyzer (SSA)



The SSA is a swept spectrum analyzer that measures the transmission spectral response of optical devices.

The principle is to use a linear frequency swept light source to quickly scan the device under test and combine with coherent detection technology to obtain the spectral response and the loss distribution of the device under test at different wavelengths.

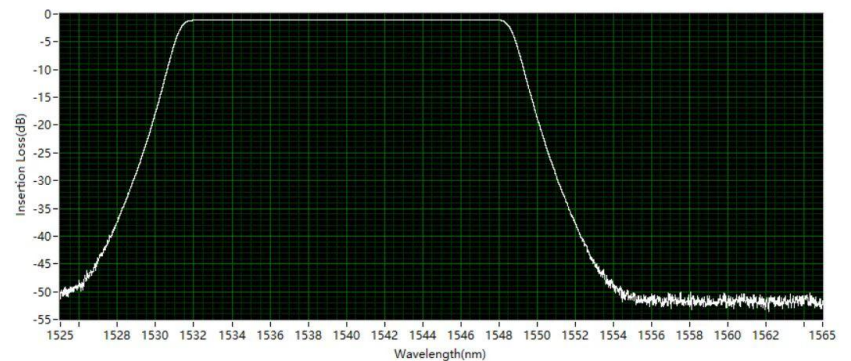
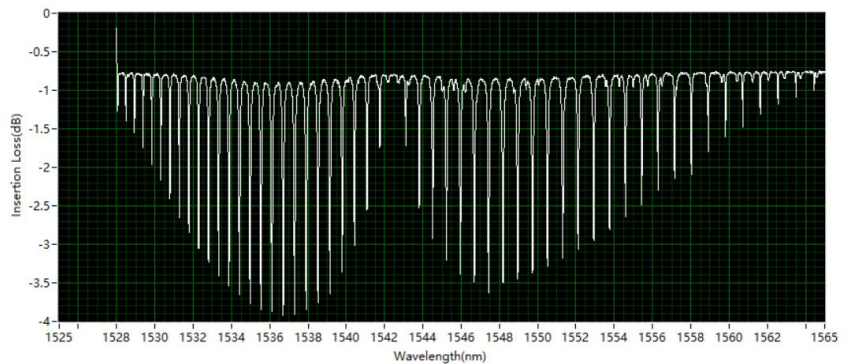
It has a built-in swept frequency light source, which can be used to the secondary development of optical measurement and analysis systems. Moreover, additional measurement of optical parameters such as GD, CD, PDL and PMD can be added to the system.

## Features

- Expandable for a variety of optical parameters
- Options of C+L/O band
- Can be used as a swept Light Source

## Applications

- Planar waveguide device
- Silicon optical devices
- Fiber optic devices
- Tunable wavelength devices, amplifiers, filters
- Secondary development of optical measurement analysis



| Parameters                    |                          |      |
|-------------------------------|--------------------------|------|
| <b>Insertion loss</b>         |                          |      |
| Measuring length <sup>1</sup> | 100                      | m    |
| Wavelength <sup>2</sup>       | 1525 ~ 1565; 1290 ~ 1330 | nm   |
| Wavelength resolution         | 1.6                      | pm   |
| Wavelength accuracy           | ±1.0                     | pm   |
| Dynamic range                 | 60                       | dB   |
| Insertion loss accuracy       | ±0.1                     | dB   |
| Resolution                    | ±0.05                    | dB   |
| <b>Swept light source</b>     |                          |      |
| Voltage <sup>3</sup>          | 1                        | mW   |
| Wavelength <sup>2</sup>       | 1525 ~ 1565; 1290 ~ 1330 | nm   |
| Wavelength accuracy           | 5                        | pm   |
| Scan speed                    | 10~100                   | nm/s |
| Side mode suppression rate    | 60                       | dBc  |
| Extinction ratio              | 15                       | dB   |
| <b>Hardware</b>               |                          |      |
| Host Power                    | 60                       | W    |
| Communication interface       | USB                      | -    |
| Fiber interface               | FC/APC                   | -    |
| Size                          | D 330 * W350 * H160      | mm   |
| Weight                        | 7.5                      | kg   |
| Storage temperature           | 0~50                     | °C   |
| Operating temperature         | 10~40                    | °C   |
| Operating humidity            | 10~90                    | %RH  |

**Remark:**

1. Expandable measurement of various optical parameters: GD, CD, PDL, PMD.
2. Scanning range can be upgraded.
3. Options of higher power version: 2mW/5mW.

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