

# Data Sheet

LOT5200 Series OTDR

## LOT 5200 Series OTDR

### Description

LinkU LOT5200 OTDR is designed to help technicians make test quickly and accurately with simple steps. It combines various function modules in one unit, including OTDR, Optical Power Meter, stable Laser Source, Visual Fault Locator, Loss Tester, Event map and fiber microscope (optional), all the modules are very useful in optical fiber evaluation.



### Features

#### Multi-Function OTDR Testing

- ❖ Auto/Manual testing and analysis
- ❖ Icon-display Fiber Mapper for easy interpretation of network events
- ❖ Multiple analysis functions on testing results:  
Segment/Event point return loss, Multi curves comparison
- ❖ In-Line Measurement of PON systems through splitters
- ❖ Fault locating, fiber length/loss/return loss measurement
- ❖ Connector/ splice/ splitter/ macro bend/ fiber-end detection
- ❖ GR-196-CORE (.SOR) file format
- ❖ Flexible file Naming
- ❖ Screenshot and auto-saved
- ❖ Built-in Power Meter, Laser Source and VFL modules

#### High Performance Platform

- ❖ 7-inch TFT capacitive touch screen
- ❖ Lightweight, 1.1kg
- ❖ Excellent Man-Machine interface for easy operation
- ❖ Short dead zone: EDZ 1m, ADZ 5m
- ❖ 16G internal storage capacity

- ❖ Full range of models with multiple wavelengths selectable 850/1300/1310/1550/1490/1625/1650nm (customized)
- ❖ U-disk, SD card, USB cable export data
- ❖ Damp-dust-shock proof
- ❖ Over 8 hours continuous operation, 20 hours standby

#### PC Software

- ❖ Multi traces analysis
- ❖ Single/multi traces printing in one report
- ❖ Batch editing and printing
- ❖ Bidirectional traces analysis
- ❖ CSV report formats



#### Stabilized Laser Source Module

- ❖ Wavelength same as the OTDR
- ❖ High precision and easy operation



#### Optical PowerMeter Module

- ❖ Multi-wavelength Calibration
- ❖ High Precision and easy Operation

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## Specification

| General                  |   |                                      |                        |                       |
|--------------------------|---|--------------------------------------|------------------------|-----------------------|
| OTDR Module              | Wavelength<br>(±20nm)   | Dynamic Range <sup>(1)</sup><br>(Db) | EDZ (m) <sup>(2)</sup> | ADZ(m) <sup>(2)</sup> |
| LOT5200-SD32             | 1310/1550   | 32/30                                | 1                      | 5                     |
| LOT5200-SD35             | 1310/1550   | 35/33                                | 1                      | 5                     |
| LOT5200-SD40             | 1310/1550   | 40/38                                | 1                      | 5                     |
| LOT5200-SD42             | 1310/1550   | 42/40                                | 1                      | 5                     |
| LOT5200-SD45             | 1310/1550   | 45/43                                | 1                      | 5                     |
| LOT5200-SS32             | 1625  | 32                                   | 1                      | 5                     |
| LOT5200-SS35             | 1625  | 35                                   | 1                      | 5                     |
| LOT5200-SS38             | 1625  | 38                                   | 1                      | 5                     |
| LOT5200-SS40             | 1625  | 40                                   | 1                      | 5                     |
| LOT5200-SP35             | 1310/1490/1550  | 35/33/33                             | 1                      | 5                     |
| LOT5200-ST35             | 1310/1550/1625  | 35/33/32                             | 1                      | 5                     |
| LOT5200-ST40             | 1310/1550/1625  | 40/38/38                             | 1                      | 5                     |
| LOT5200-ST42             | 1310/1550/1625  | 42/40/38                             | 1                      | 5                     |
| LOT5200-MD26             | 850/1300  | 22/26                                | 1.2                    | 8                     |
| LOT5200-SM32             | 1310/1550/850/1300  | 32/30/22/26                          | 1 (SM) /1.2 (MM)       | 5 (SM) / 8 (MM)       |
| LOT5200-SM35             | 1310/1550/850/1300  | 35/33/22/26                          | 1 (SM) /1.2 (MM)       | 5 (SM) / 8 (MM)       |
| LOT5200-SM40             | 1310/1550/850/1300  | 40/38/22/26                          | 1 (SM) /1.2 (MM)       | 5 (SM) / 8 (MM)       |
| Pulse Width              | SM: 3ns, 5ns, 10ns, 20ns, 50ns, 100ns, 200ns, 500ns, 1µs, 2µs, 5µs, 10µs, 20µs<br>MM: 3ns, 5ns, 10ns, 20ns, 50ns, 100ns, 200ns, 500ns, 1µs, 2µs |                                      |                        |                       |
| Min. Sampling Resolution | 0.05 m  |                                      |                        |                       |
| Max. Sampling Point      | 256,000   |                                      |                        |                       |
| Linearity                | $\leq 0.05\text{dB}/\text{dB}$  |                                      |                        |                       |
| Loss Resolution          | 0.001dB   |                                      |                        |                       |
| Distance resolution      | 0.01 m  |                                      |                        |                       |
| Distance Accuracy        | $\pm (1\text{m} + \text{measuring distance} \times 3 \times 10^{-5} + \text{sampling resolution})$ (excluding IOR uncertainty)                  |                                      |                        |                       |
| Attenuation Accuracy     | $\pm 0.05 \text{ dB}/\text{dB}$   |                                      |                        |                       |
| Reflectance Accuracy     | Single mode: $\pm 2\text{dB}$ , Multi-mode: $\pm 4\text{dB}$  |                                      |                        |                       |
| Connector                | FC/UPC & SC/UPC (Standard)  |                                      |                        |                       |

Note:

- (1) Dynamic range is measured with maximum pulse width, averaging time is 3 minutes, SNR=1;  
The level difference between the RMS noise level and the level where near end back-scattering occurs.
- (2) Event dead zone is measured with pulse width of 3ns; attenuation dead zone is measured with pulse width of 5ns.
- (3) The wavelength of 1625nm in all models can be customized to 1650nm.

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## Standard Modules

| Visual Fault Locator |          |
|----------------------|----------|
| Wavelength           | 650nm    |
| Output Power         | 10mw @CW |
| Frequency            | CW/2Hz   |



Visual Fault Locator

| Stabilized Laser Source Module |                    |
|--------------------------------|--------------------|
| Wavelength                     | 1310nm,1550nm      |
| Output Power                   | -5dBm±2dB @CW      |
| Frequency                      | CW/270Hz/1KHz/2KHz |



Laser Source

| Power Meter Module    |   |
|-----------------------|---|
| Calibrated Wavelength | 850nm, 1300nm, 1310nm, 1490nm, 1550nm, 1625nm, 1650nm                                       |
| Measurement Range     | A: -70dBm - +10dBm (-60dBm - +6dBm @ 850nm)<br>B: -50dBm - +23dBm (-40dBm - +20dBm @ 850nm) |
| Detector Type         | InGaAs  |
| Display Resolution    | 0.01dB  |
| Accuracy              | ± 5% ± 0.01nW (±0.5dB@850nm)  |



Power Meter



Loss Tester

## Optional Modules

| Optical Connector Inspector Module - LFM |  |
|--|--|
| Magnification                            | 400x   |
| Resolution Ratio                         | 0.75 μm  |
| Sensor                                   | 1/3 decimeter    1.3 million pixels  |
| Weight (kg)                              | Probe (0.14)   |
| Dimensions(cm)                           | Probe (22*3*3)   |
| Work/Storage                             | -10°C~+50°C / -20°C~+70°C  |
| USB Interface                            | 1.0/1.1/2.0  |
| Tips                                     | 25-U-M    125-U-M    SC-U-F    LC-U-F<br>25-A-M    125-A-M    SC-A-F    LC-A-F |



\*Specifications subject to change without notice

## Standard Package:

Main Unit, Lithium Battery\*2, 16G Storage Card, Manual, Software, Mini USB Cable, Power Adaptor, Carrying Bag, Calibration Report