6000 Series Optical Time Domain Reflectometer OTDR

Baudcom 6000 series OTDR can used to test single-mode wavelengths of 1310nm, 1550nm, 1490nm, 1625nm and 1650nm, multi-mode wavelengths of 850nm and 1300nm as well as customized special wavelengths. It provides multiple optional modules, such as single wavelength, multi-wavelength and online test. With the maximum dynamic range of up to 50dB, the device can be used for remote multi-branch communication network test. It's designed with a minimum event dead zone of 0.5m which makes the near connection easy to be supervised, and the lowest sampling resolution of 2.5cm which enables it to locate the event point accurately. Additionally, the device is also designed with multiple convenient functional options, such as stable light source, optical power meter, visible red light source and fiber end face inspection tester.

The OTDR is designed with an operating temperature and a storage temperature of -10℃~50℃ and -40℃~70℃ respectively to meet both EMC requirements as well as vibration and shock test requirements, a MTBF(θ0) of 6000h or above to ensure a high reliability, and a 75W built-in Li battery to ensure an endurance for continuous measurement in the wild field.

Features

- A maximum dynamic range of 50dB, and 256k data sampling points
- Online test of PON network
- Integrated mono-mode and multi-mode test
- Automatic monitoring of optical communication signals
- File formats of Bell core GR196 and SR-4731 supported

Specifications

Dimension	252*180*55cm; about 1.8kg
Display	800×480, 7-inch TFT color LCD (a capacitive touch screen in the standard configuration, and a resistive touch screen optional)
Interface	USB, Micro-USB, 10M/100M Ethernet, earphone and Micro SD
Optical interface	FC/UPC (standard configuration), LC/UPC, SC/UPC and ST/UPC optional
Pulse Width	Single mode: 5ns, 10ns, 20ns, 50ns, 100ns, 200ns, 500ns, 1μs, 2μs, 5μs, 10μs, 20μs
Testing Distance	0.4, 0.8, 1.6, 3.2, 6.4, 16, 32, 64, 128, 256 and 512km (single-mode); 0.4, 0.8, 1.6, 3.2, 6.4, 16 and 32km (850nm multi-mode)
Ranging resolution	0.05, 0.1, 0.2, 0.5, 1, 2, 4, 8, 16 and 32m
Sampling Point	Maximum 256,000 points
Linearity	0.03dB/dB
Ranging accuracy	±(0.75 + sample interval + 0.0025% × range)(excluding the refractivity placement error) (m)
Testing PW	3, 5, 10, 30, 80, 160, 320, 640, 1280, 5120, 10240 and 20480ns 3, 5, 10, 30, 80, 160, 320, 640 and 1280ns(850nm multi-mode)
Refractivity setting range	1.00000 ~ 2.0000 (step: 0.00001)
Loss resolution	0.001dB
IOR Setting	1.4000~1.7000, 0.0001 step
Units	km, m, thousand feet, feet
Power Supply	DC: 17V±3V(2A) AC/DC adapter: AC100V~240V, 50/60Hz and 1.5A Internal Li battery: 11.1V, 6800mAh, battery operating time: 8h Maximum power consumption: 10W
Data Storage	Internal memory: 8GB
Language	Simplified Chinese, English, Spanish available (contact the office for other language support)
Environmental Conditions	Operating temperature: -10ºC~+50ºC (battery charging: 5ºC~40ºC) Storage temperature: -40ºC~+70ºC (battery: -20ºC~60ºC) RH: 5% ~95%, no condensation
Visual Fault Locator (optional)	Operating wavelength: 650nm±20nm; Working output power: 2mW (typical); Operating mode: CW, 1Hz and 2Hz;
Optical Power	Wavelength range: 1200nm~1650nm

Meter (optional)	Power range: -60dBm~0dBm Uncertainty: ±5%(-25dBm, CW)
Stable laser source (optional)	Operating wavelength: single mode 1310nm/1550nm Output power: ⩾-5dBm Operating mode: CW, 270Hz, 1kHz and 2kHz
Standard Accessories	OTDR with battery Built-in, 1xPower adapter, 1xST adapter, 1xSC adapter, 1xLC adapter, 1xUser guide, 1xCarrying bag

Packing case:

soft bag (standard)

special engineering plastic case (option)

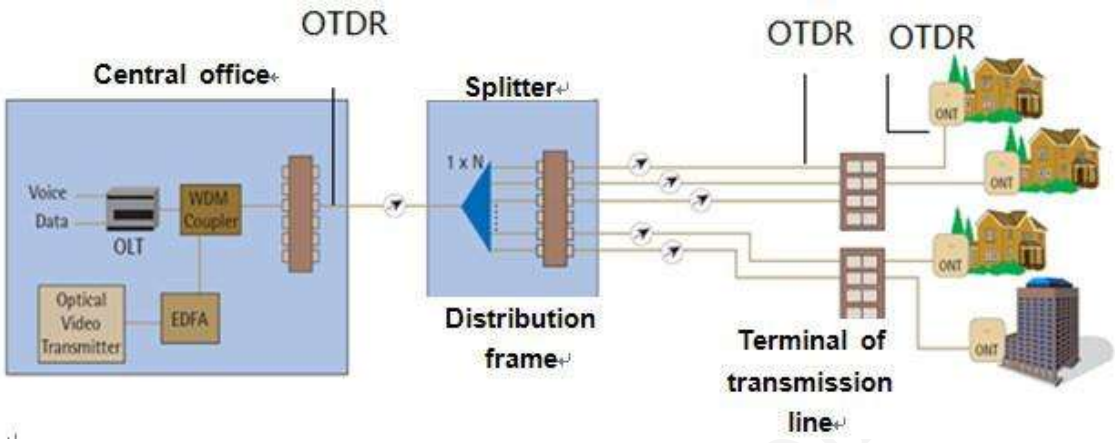
Ordering Information:

Type	Testing wavelength	Dynamic range	Event/Attenuation dead-zone
BD6000-2201	MM 850/1300nm	26/34dB	1m/5m
BD6000-2108	SM 1310/1550nm	30/28dB	1.5m/5m
BD6000-2101		37/35dB	1.5m/8m
BD6000-2102		42/40dB	1.5m/8m
BD6000-2103		45/42dB	0.8m/4.5m
BD6000-2109		46/46dB	0.8m/4.5m
BD6000-2105	SM 1550/1625nm	36/36dB	1.5m/8m
BD6000-2107	SM 1550/1650nm	36/36dB	1.5m/8m
BD6000-3101	SM 1310/1490/1550nm	37/35/35dB	0.8m/4.5m
BD6000-3102	SM 1310/1550/1625nm (with built-in filter)	37/35/35dB	0.8m/4.5m
BD6000-3103		42/40/40dB	0.8m/4.5m
BD6000-3106		30/28/28dB	1.5m/8m
BD6000-3104	SM 1310/1550/1650nm (with built-in filter)	42/40/40dB	0.8m/4.5m
BD6000-3105		37/35/35dB	1.5m/8m
BD6000-4101	SM 1310/1490/1550/1625nm (with built-in filter)	37/35/35/35dB	0.8m/4.5m
BD6000-4105	SM 1310/1490/1550/1650nm (with built-in filter)	37/35/35/35dB	0.8m/4.5m
BD6000-4001	MM 850/1300nm SM 1310/1550nm	26/34/37/35dB	1.5m/8m
BD6000-4002		24/28/30/28dB	1.5m/8m

Notes:

1. One must and only one can be chosen for the standard module.
2. An ambient temperature of 23ºC±5ºC, the maximum test PW, over 500 times averagely and a SNR of 1.
3. A range of 1.6km or smaller, a PW of 3ns, a fiber end face reflection loss of 40dB or above, and a typical value.
4. A range of 1.6km or smaller, a PW of 5ns or smaller, a fiber end face reflection loss of 50dB or above and a typical value

Application:



1. Rapid automatic test

Due to the automatic test function of 6000, it's not necessary for the user to know more about its operation. Connect the optical fiber and press the [Test] button. Then, the device will set the optimum test conditions automatically, and finally output accurate test results, such as the test curve and the list of events

2. Automatic monitoring and alarm of incoming optical signals

When the OTDR is testing the optical fiber line, the optical communication signal in the optical fiber, if any, will lead to inaccurate test results and even unrecoverable damages to the detectors in the device. The OTDR 6000 can monitor the optical communication signal in the optical fiber under test automatically. As long as the optical fiber under test is connected to the optical interface of 6000, the device can automatically sense and monitor whether there is optical communication signal in it. Once an optical signal is monitored, it will prompt an alarm in time, so as to provide the quickest and the most timely protection for the device.

3. Unique PON network test

As an ideal tester of ODN and FTTx, 6000 series OTDR is provided a unique built-in PON network test function, can penetrate an optical splitter of up to 1:128, and can be used to test each branch of the PON network accurately.