A high performance & multifunction OTDR unit for FTTx / PON fiber networks

Key Features

- Event dead zone: <1 m</p>
- Dynamic range: up to 45 dB
- Wavelengths: 1300, 1310, 1490, 1550, 1625 and 1650nm
- Battery autonomy: >8 hours
- High-speed auto measurement & analysis
- Unique PON testing capability
- Multiple wavelengths and model testing capabilities
- 0.05m high distance resolution, 128k sampling point
- Communication light check automatically
- Visible fault locating (VFL)
- Supporting Bellcore GR196 &SR-4731 file format
- Abundant external interface
- Remote function via Ethernet

Typical Applications

- Access Network Testing
- LAN/WAN Characterization
- Private Networks
- Data Centers
- FTTx, CATV, LAN, Access and Metro Networks

S2102 OTDR is ideal for access and FTTH network testing. It enables the user to test through 1x32 and even 1x64 splitters for PON testing. The S2102 OTDR can provide single mode and/or multimode testing capabilities. It is designed to test up to four wavelengths in a single unit (ex. a combination of 1300, 1310, 1490, 1550, 1625 and 1650nm wavelengths). The S2102 can be used for long range to FTTx, CATV, LAN, Access and Metro networks.





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Features To Boost Your Efficiency

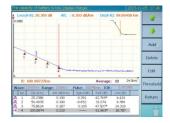
Extra-short Event Dead Zone

Due to its high resolution, S2102 OTDR has 1m extra-short event dead zone, which is suitable for testing short optical fiber and pigtail optical fiber.



High-speed Auto Analyzation

The S2102 can quickly determine and locate the events and faults and pinpoint issues. It lists all events in an event table, so it is very useful for maintainers to improve efficiency. Relative background knowledge is not required for use.



Multiple Wavelengths and Models

The S2102 OTDR can provide single mode and/or multimode testing capabilities, designed to test at up to four wavelengths in a single unit.



Convenient VFL Function

The built-in 650nm VFL function, by CW, 1Hz and 0.5Hz three working models makes it easier for the user to identify bad splices and connectors.



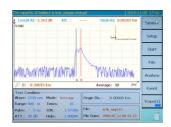
Unique PON Testing Capability

Ideal for access and FTTH network testing, it enables the user to test through 1:8 \sim 1:64 splitters for PON testing. The S2102 offers an exceptional 1m event dead zone and 0.05m high distance resolution. The user can characterize all events between the transmitter and the central office's fiber distribution panel.



Auto Light Check

The S2102 OTDR can automatically detect if the communication light is present after the fiber is connected. Once the light is verified, simultaneously, a warning message will be displayed and an internal OTDR protection will activate instantly.





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WORK FROM ANY WHERE, ANY TIME

The S2102 has abundant external interfaces, such as USB, Mini-USB, Ethernet, Earphone and SD. With these options, it can provide the following functions:

- Short training time via multimedia for operators enables you to become a measuring expert in no one.
- Implementing remote control through Ethernet allows troubleshooting from long distances. Printing trace and event table
- Allows printing of trace and event table.
- Easily update application software on-line.







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Technical Specifications

Wavelength (nm)	1300, 1310, 1490, 1550, 1625 and 1650				
Distance Range (km)	Singlemode: 0.4,0.8,1.6,3.2,6.4,16,32,64,128,256,512				
Pulse Width (ns)	Singlemode: 5,10,30,80,160,320,640,1280,5120,10240,20480				
Linearity (dB/dB)	±0.05				
Loss Threshold (dB)	0.01				
Loss Resolution (dB)	0.001				
Sampling Resolution (m)	0.05,0.1,0.2,0.5,1,2,4,8,16,32				
Sampling Points	Up to 128k				
Distance Uncertainty (m)	±(0.75m + sample space + measurement distance×0.0025%)				
Distance Unit	km, m, kft, ft				
Memory Capacity	≥ 800 traces(build-in),				
Group Refractive Index Setting	1.00000 to 2.00000 (0.00001steps)				
VFL (Optional)	650nm±30nm, 2mW(typical); CW/1Hz				
Optical Power Meter (Optional)	Wavelength range: 1200nm to 1650nm Measurement range: -60 to 0dBm Measurement accuracy: ±5% (-25dBm, CW)				

General Information

Dimensions (WxHxD)mm	295×186×75		
Weight	2.5kg Approx.		
Display	640×480, 6.5 inch TFT-LCD (touch screen)		
Interface	USB, Mini-USB, Ethernet, Earphone, SD		
Optical connector	FC/UPC (ST/UPC or SC/UPC are available)		
	Operating: -10 ℃ to 50 ℃ (14 ℉ to 122 ℉)		
Environment	Storage: -20 ℃ to 60 ℃ (-4 ℉ to 140 ℉)		
	Relative humidity: 0 % to 95 % non-condensing		
	AC adapter: 100~240V, 50/ 60Hz,2A)		
Dower cumby	DC: 19V(3.42A)		
Power supply	Built-in Lithium battery: 4400mAh, 14.8V		
	Operating time ≥8 hours ((Low brightness, exclude measuring)		



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Ordering Information

Modela	Operating wavelength	Fiber type	Dynamic Range ^b (dB)	Event Dead	Attenuation dead zone(m)
S2102-01	1625nm		38	1	10
S2102-02	1625nm(build-in filter)		36	1	10
S2102-03	1650nm	SMF	38	1	10
S2102-04	1650nm(build-in filter)		36	1	10
S2102-05	1300nm	MMF	36	2	13
S2102-06	1310/1550nm		42/40	2/2	10/10
S2102-07	1310/1550nm		40/38	1/1	10/10
S2102-08	1310/1550nm		37/35	1/1	10/10
S2102-09	1550/1625nm		38/38	1/1	10/10
S2102-10	1550/1625nm(build-in filter)		36/36	1/1	10/10
S2102-11	1550/1650nm		38/38	1/1	10/10
S2102-12	1550/1650nm(build-in filter)		36/36	1/1	10/10
S2102-13	1310/1490/1550nm	SMF	39/34/38	1/1/1	10/10/10
S2102-14	1310/1550/1625nm	SIVIF	39/38/36	1/1/1	10/10/10
S2102-15	1310/1550/1625nm(build-in filter)		37/36/34	1/1/1	10/10/10
S2102-16	1310/1550/1650nm		39/38/36	1/1/1	10/10/10
S2102-17	1310/1550/1650nm(build-in filter)		37/36/34	1/1/1	10/10/10
S2102-18	1310/1490/1550/1625nm		35/32/34/34	1/1/1/1	10/10/10/10
S2102-19	1310/1490/1550/1625nm (build-in filter)		36/34/34/34	1/1/1/1	10/10/10/10
S2102-20	1310/1490/1550/1650nm		38/36/36/36	1/1/1/1	10/10/10/10
S2102-21	1310/1490/1550/1650nm (build-in filter)		36/34/34/34	1/1/1/1	10/10/10/10

- a: One and only one module of above must be selected.
- b: Pulse width 10240ns, average times \geq 300,SNR=1, 23°C±2°C(73.4 °F±3.6 °F);
- c: Dead zone mode, distance range: ≤3.2km, pulse width: 5ns, terminal reflection loss: ≥40dB, typical;
- Note 1: Standard LCD brightness, enhanced brightness is optional
- Note 2: The standard OTDR interface type is FC/UPC, type of FC/APC is optional.
- Note 3: OPM & VFL function are optional, not standard configuration.

Standard Accessories

NO.	Name	QTY		
1	Power line	1		
2	AC/DC adapter	1		
3	Trace analyzing software(CD)	1		
4	Hard Carrying case	1		
	(Including gallus)	I		
5	Special gallus of instrument	1		

