2100PRO SERIES

OPTICAL TIME DOMAIN REFLECTOMETER

Touch + Key Dual Operation | **12h Dual Battery Life** | **6-in-1 Rugged Tester** | **PON Live Test**

DESCRIPTION

Built for frontline field technicians working in tough conditions: the 2100Pro eliminates the pain of touchscreens that don't work with gloves, dead batteries mid-job, and carrying multiple test tools up poles or down manholes. This rugged OTDR features dual operation mode — responsive touchscreen plus hard physical buttons that work with gloves, wet hands or dirty screens — and intelligent dual-battery power supply for up to 12 hours of continuous testing.

It integrates 6 test functions in one drop-resistant unit: OTDR, power meter, light source, VFL, event map and optional fiber inspection, with up to 45dB dynamic range and 0.8m ultra-short event dead zone. Filtered models support live PON testing without interrupting customer service. Simple one-button auto test makes it easy for new technicians, while the rugged body stands up to daily field use, making it the reliable workhorse for FTTx installation, access network maintenance and CATV troubleshooting.



APPLICATIONS

- FTTx/PON construction & maintenance
- CATV/HFC network testing
- Access network & LAN installation
- Metro network verification
- Data center structured cabling
- Live fiber troubleshooting
- Lab & factory fiber QC
- Outside plant engineering



FEATURES

- Touch + hard key dual operation, works with gloves/wet hands
- Rugged drop-resistant body for daily field use
- Dual-battery intelligent power, 12 hours continuous work
- One-button auto test, easy for new technicians
- 6-in-1 integration, no extra tools needed
- PON online test with 1625/1650/1490nm filter
- MMF 850/1300nm module optional
- Up to 45/43dB dynamic range
- 0.8m event dead zone, high precision
- 256k sampling points, 5cm resolution
- 16GB storage, 100k+ traces, SOR format
- Optional USB fiber inspection probe

OTDR	Power Meter	Light Source	VFL	Event Map	Inspection
Fault & Length Test	Optical Power Check	Link Loss Test	Visual Break Location	Icon-based Fault Guide	Optional Fiber Probe

Quick Selection Guide: FTTH/access network choose A32/A35; long-haul trunk choose A40/A45; PON live maintenance choose AB/AP/AC series; data center multi-mode choose M26/AM series.

ORDERING INFORMATION

Model	Wavelength (nm)	Dynamic Range (dB)	Dead Zone (m)	Note
2100PRO-A32	1310/1550	32/30	0.8/4	Standard dual wavelength
2100PRO-A35	1310/1550	35/33	0.8/4	Standard dual wavelength
2100PRO-A37	1310/1550	37/35	0.8/4	Mid-range dynamic
2100PRO-A40	1310/1550	40/38	0.8/4	High dynamic range
2100PRO-A42	1310/1550	42/40	0.8/4	High dynamic range
2100PRO-A45	1310/1550	45/43	0.8/4	Long-haul trunk model
2100PRO-B35	1625	35	0.8/4	Single wavelength with filter
2100PRO-AB35	1310/1550/1625	35/33/32	0.8/4	Triple wavelength with filter
2100PRO-AB45	1310/1550/1625	45/43/40	0.8/4	High range triple filtered
2100PRO-AC35	1310/1550/1650	35/33/32	0.8/4	1650nm filtered model
2100PRO-AP35	1310/1490/1550	35/33/33	0.8/4	PON triple wavelength filtered
2100PRO-M26	850/1300	22/26	2/6	Multi-mode OTDR
2100PRO-AM40	1310/1550 + 850/1300	40/38 + 22/26	0.8/4 + 2/6	Single + Multi-mode all-in-one

Note: More models (38/42dB filtered, custom wavelength, WiFi/Bluetooth/GPS) available on request. Filtered models support live fiber testing without interrupting service. All units include free PC analysis software for report generation.

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OPTICAL TIME DOMAIN REFLECTOMETER

TECHNICAL SPECIFICATIONS

OTDR Module	
Pulse Width	3ns ~ 20μs (SM), 3ns ~ 2μs (MM)
Distance Range	100m ~ 240km (SM), 500m ~ 40km (MM)
Sampling Points	Max 256,000 points
Sampling Resolution	Min 5cm
Distance Accuracy	±(1m + 3×10^{-5}×distance + sampling res.)
Linearity	≤0.05dB/dB
Reflectance Accuracy	±2dB (SM), ±4dB (MM)
IOR Range	1.2000 ~ 1.5999, 0.0001 step
File Format	Standard SOR (Telcordia SR-4731)
Event Analysis	Auto event map, multi-curve compare, 2/4-point loss test

OPM Module (Integrated)	
Wavelength Range	800 ~ 1700nm
Calibrated Wavelength	850/1300/1310/1490/1550/1625/1650nm
Test Range	Type A: -70~+10dBm; Type B: -50~+26dBm
Accuracy	±0.35dB
Connector	Universal FC/SC/ST adapter
OLS & VFL Module	
OLS Output Power	-5dBm ±1dB
OLS Modulation	CW / 270Hz / 1kHz / 2kHz
VFL Wavelength	650nm, 10mW Class 3B
VFL Range	Up to 12km
VFL Mode	CW / 2Hz blink

General Specifications	
Display	5.6" 800×480 TFT anti-glare touchscreen, touch + key dual operation
Battery	Dual 7.4V/2500mAh Li-ion, air transport certified
Battery Life	12 hours continuous testing
Charging Time	<3 hours (power off)
Storage	16GB internal, ~100,000 test traces
Interface	2×USB, FC/SC/ST universal optical port
Language	English, Spanish, French, Portuguese, etc.

Environment & Physical	
Operating Temp	-10°C ~ +50°C, ≤95% RH non-condensing
Storage Temp	-20°C ~ +75°C, ≤95% RH non-condensing
Dimensions	215 × 155 × 68 mm
Weight	1.1kg (with dual batteries)
Standard Accessories	Main unit, power adapter, 2×batteries, FC adapter, USB cable, carry case, user manual
Optional Accessories	SC/ST/LC adapters, bare fiber adapter, USB fiber inspection probe, launch cable
Certification	CE, RoHS, laser safety IEC 60825

Notes: 1. Dynamic range measured at max pulse width, 3min averaging, SNR=1. 2. Event dead zone measured at 3ns pulse, RL ≥-45dB. 3. Filtered models (1625/1650/1490nm) support live fiber PON testing without interrupting service. 4. Custom models and functions available on request.