High performance

PON-Optical Time Domain Reflectometer

NOV6800 High performance

HIGH QUALITY PROMISES
1-YEAR WARRANTY

7inch
Color capacitive touch screen

7
7 Functional modules

45dB
45dB Dynamic range

20H
20h Super long standby

7 7function modules meet all your test

Event Map Intelligent Optical Link Mapper

Signal detection Effective protection of APD

Remote upgrade latest technical support

SOR Batch processing Data fast processing

Calle Herreros nº 7 (Parque Empresarial Prado del Espino)

28660 – Boadilla del Monte Madrid - Spain

CHARACTERISTICS

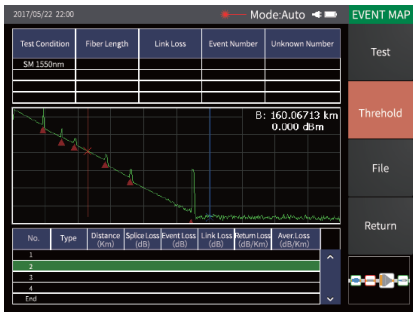
NOV6800 Series high performance Optical Time Domain Reflectometer is a new generation of high performance, multi-function and Intelligent measuring instrument designed by Nov Communications Technology for testing optical fiber communication system. It adopts 7inch color capacitive touch screen, the operation is more simple; and integrates 7 functional modules, more effective to help customers solve the communication link field test and later maintenance; the highest 45 dB dynamic range, can penetrate optical splitter, effective PON network testing; intelligent power-saving management, 20 hours long standby, efficient protection of test dimension continuous.

Applications: It is mainly used to measure the length, loss and connection quality of all kinds of optical fibers and cables, and can be widely used in engineering construction, link maintenance and testing, emergency repair, and the development and production of optical fibers and cables.

The design concept of multifunctional integration, precision testing and convenient operation make the field test operation more simple.

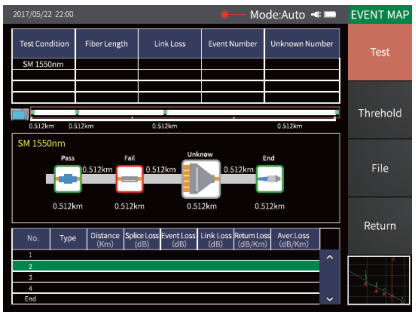
All-in-one FTTx Installation and Maintenance Functions

OTDR



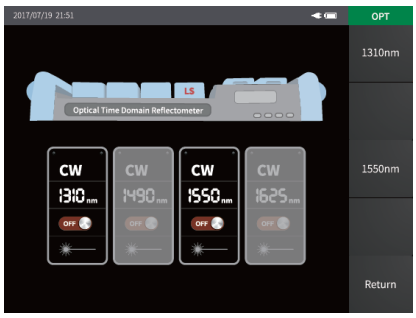
OTDR mode allows for measuring distance, loss, reflectivity, attenuation and accumulation loss on a fiber optic link.

EVENT MAP(OTDR)



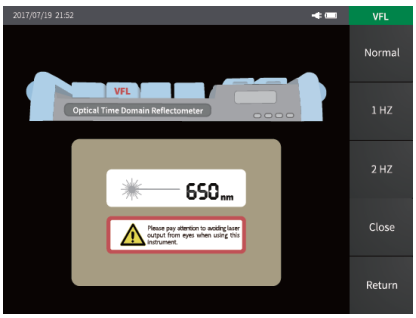
NOV6800 series OTDR uses 1625nm wavelength to scan and analyze the access point and proceed online testing with optical filter and will not disturb the service. It could pass the 1: 2 ~ 1: 64 optical splitter

LS (Laser source)



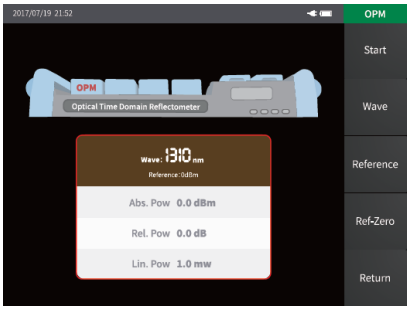
NOV6800 series OTDR comes with optional built-in laser source through OTDR Port that let technicians easily verify the total loss of the local network with a power meter.

VFL (Visual fault locator)



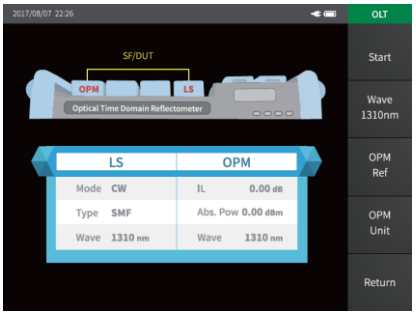
The VFL, available as a standard module in NOV6800 series OTDR, offers built-in 650nm visual fault location on a FC/UPC connector.

PM (Power meter)



NOV6800 series OTDR comes with optional built-in power meter that let technicians easily verify the presence of a signal

OLT (Optical Loss test Set)



Combining module light source with the Power Meter supports use as a Loss Test Set.

Technical Specification

Data Manager

Use Data Manager to elaborate and print out result files on upper computer within a few steps.

Convenient Operation

One key automatic test Unique diagnostic function for test results Multi wave simultaneous testing function Ethernet Remote control function

General

Dimension	227×160×70mm
Weight	≤ 1.2 kg
Display	7-inch LCD + Touch screen
Interface	USB ports, Mini-USB, 10M/100M Ethernet Port
Power Supply	AC/DC adapter：Input：100V~240V, 50/60Hz, 0.6A; Output: 12V~19V
Battery	7.4V(dc)/1.5A Lithium battery (with air traffic certification) Operating time: 12 hours, Telcordia GR-196-CORE Charging time: <4 hours (power off)
Power Saving	Backlight off: Disable/1 to 99 minutes Auto shutdown: Disable/1 to 99 minutes
Data Storage	Internal storage：8G, 200,000 curves; External storage: 4G
Language	User selectable (English, Simplified Chinese, French, Korean, Russian, Spanish and Portuguese-contact us for availability of others)
Working temperature	-10℃~+50℃
Storage temperature	-40℃~+70℃
Relative humidity	0~95%, Non-Condensing
Proof	IP65 (IEC60529)
Laser safety	IEC 60825-1, 21 CFR Class 1
Accessories	Standard: Main unit, power adapter, Lithium battery, FC adapter, USB cord, User guide, CD disk, carrying case Connector FC, SC, ST / APC or UPC, Bare fiber adapter

Technical Specification

Model	N1	N2	NV1	NV2
Wavelength	1310nm ±20nm 1550nm ±20nm		1310nm ±20nm 1550nm ±20nm 1625nm ±15nm (Filtered)	1310nm ±20nm 1490nm ±20nm 1550nm ±20nm 1625 ±15nm (Filtered)
Dynamic Range (dB)	38/37dB	45/43dB	39/37/37	38/37/37/37
Event Dead-Zone (m)	0.8m			
Attenuation Dead-Zone (m)	5, 5, 5, 6m			
Pulse Width	3ns, 5ns, 10ns, 20ns, 50ns, 100ns, 200ns, 500ns, 1µs, 2µs, 5µs, 10µs, 20µs			
Testing Distance	500m, 1km, 2km, 4km, 8km, 16km, 32km, 64km, 128km, 260km			
Loss Resolution	±0.001dB			
Loss Accuracy	±0.04dB/dB			
Sampling Point	16,000 ~ 256,000 Point			
Sampling Resolution	0.05m ~ 16m			
Reflection Accuracy	±3dB			
Distance Resolution	0.01m			
Distance Accuracy	±(0.75m + Sample interval + 0.005% × Test distance)			
Loss Analysis	4-point method / 5-point method			
IOR Setting	1.3000~1.7000, 0.0001 step			
Units	Km, miles, feet			
OTDR Trace Format	Telcordia universal, SOR, issue 2 (SR-4731) OTDR: User selectable automatic or manual set-up			
Testing Modes	Visual fault locator: Visible red light for fiber identification and troubleshooting Light source: Stabilized Light Source (CW, 270Hz, 1kHz, 2kHz output) Field microscope probe			
Fiber Event Analysis	Reflective and non-reflective events: 0.01 to 9.99dB (0.01dB steps) Reflective: 0.01 to 32dB (0.01dB steps) Fiber end/break: 3 to 20dB (1dB steps)			
Other Functions	Real time sweep: 1Hz Averaging modes: Timed (1 to 3600 sec.) Live Fiber detect: Verifies presence communication light in optical fiber Trace overlay and comparison			

Technical parameter

VFL Module (Visual Fault Locator as standard function)

Wavelength	650nm ±20nm
Power	≥10mw, CLASS 3R
Range	12km
Connector	SC/APC
Launching Mode	CW/1HHz/2Hz

PM Module (Power Meter, as optional function)

Wavelength Range	800~1700nm
Calibrated Wavelength	850/1300/1310/1490/1550/1625/1650nm
Test Range	-50~+23dBm
Resolution	0.01dB
Accuracy	±0.35dB±1nW
Modulation Identification	270/1k/2kHz, P_{input}≥-40dBm
Connector	Universal

LS Module (Laser Source, as optional function)

Working Wavelength (±20nm)	1310/1490/1550/1625nm (Consistent with OTDR output)
Output Power	≥-5dBm
Accuracy	±0.5dB
Connector	SC/APC

Notes:
①Typical, back light off, sweeping halted at 25℃, 12 hours typical continuous testing.
② 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.