

# FF-6800

## Optical Cable Identifier OCID

High Sensitive, Up to 120km Fiber Cable Survey  
Back Scattering Laser Tech Applied for Cables with Extreme Low Reflection



### All Functions in One Device

- Optical Cable Identifier
- OTDR (Auto Test)
- OTDR (Real Time Test)
- OTDR (Average Test)
- Event Map
- Optical Power Meter
- Optical Light Source
- Visual Fault Locator
- Insertion Loss Test

## THE NEW OPTICAL CABLE IDENTIFIER OCID... REINVENTED

FF-6800 Series Optical Cable Identifier is an intelligent instrument designed for the construction and maintenance of optical cable lines in optical communication system. In view of the complex wiring environment and the difficulty of locating faults during the construction and long-term use of optical cables, FF-6800 series can provide fast, effective and accurate fault solutions. When the target optical cable is bent or shaken, the optical cable identifier instrument can quickly capture the vibration signal and display it through waveform and sound, so as to locate the target optical cable quickly.

FF-6800 series provides the simplest method for Telecommunication engineers and technicians to track and identify the target optical fiber or cable clearly. Optical cable identifier instrument has the advantages of friendly interface, simple and practical, non-toxic and harmless, and does not damage optical cable. It is suitable for accurate identification of optical cable in the environment of manhole, tunnel, overhead, pipeline and so on. It is a new instrument tailored for optical cable construction, acceptance and operation and maintenance technicians.

### Features

- > Easily identify all kinds of break-point, APC or UPC optical cable end
- > Integrating full-function OTDR, LS, OPM, VFL and optical loss test functions
- > One-key intelligent test and without tedious parameter settings
- > Single-fiber test, no looping at the distal end
- > Multi-functional test platform to meet diversified test requirements
- > 5.6 inch color LCD touch screen, button/ touch dual operation
- > Locate the target optical cable through audio or visual signals in complex environment
- > Intelligent optical fiber link detection, graphical results show, clear and easy to understand

**Request Tech Support**  
[tech@FirstFiber.cn](mailto:tech@FirstFiber.cn)

## WHY DO WE NEED OCID?

Nowdays, the demand for optical cables is increasing day by day, and the optical cables are expanding from single core to the largest 2096 cores. However, the more the optical cables are laid, the more complicated laying lines are, the more problems they will bring. With the rapid development of communications, the integration of power, radio and television and other cutting-edge forces, and the merger of operators, a large number of optical cables need to be maintained, so how to correctly distinguish optical cables has become an urgent problem to be solved.

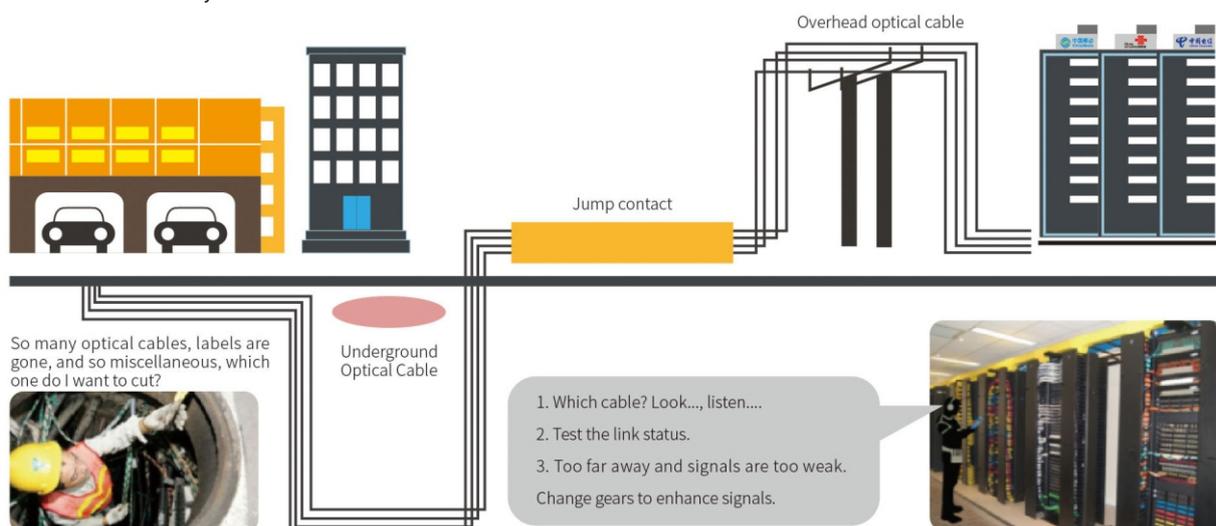
### Without OCID, how could we identify a cable from thousands of chaotic cables?

1. Dragging cables one by one from a known place, **But**, it takes a lot of time, and the binding can't be separated.
2. Using OTDR, **But**, bending optical cables may cause damage to optical cables.
3. By frozen liquid with OTDR, **But**, it is very difficult to operate frozen liquid and the liquid is potentially harmful to cables.
4. By radio frequency detection method, **But**, it can not detect the buried cables without metal reinforcement string.
5. By Fiber identifier, **But**, users have to peel the optical cable, which has a certain impact on the transmission of the line. If not peeling, only two ends of the tails can be found.
6. By red light source, **But**, it is unable to detect outdoor cables routing, and only for short indoor cables.



## HOW TO USE OCID?

With this test instrument, the line maintenance personnel only need to connect the cable to the test end of the optical cable census instrument, and then bend or shake the optical cable at the far end. Then the test instrument can quickly and accurately find the target optical cable through audio and video signals. Its powerful application function can greatly reduce the emergency repair of optical cable maintenance time, reduce the cost of construction and management, greatly improve the work efficiency.



**GENERAL**

<b>Size/Weight</b>	227x160x70mm/ 1.5kg
<b>Display</b>	5.6 Inch Colorful LCD Touch Screen
<b>Interface</b>	USB, TF Card Port, Rj45 Port, OTDR port, VFL port, Power Meter Port, Charging Port
<b>Power Supply</b>	Input: 100V(ac) to 240V(ac), 50~60Hz; Output: 12~19V(DC), 1.5A 5000mAh/7.4V Lithium battery (with air traffic certification)
<b>Working Time</b>	>8 hours; Charging < 5 hours
<b>Power Saving</b>	Intelligent power management Auto power off: Never/1min/5min/10min/30min/60min
<b>Data Storage</b>	TF Card (8G Max)
<b>Language</b>	English in Default
<b>Environmental Conditions</b>	Operating temperature and humidity: -10°C~+50°C, ≤95% (non-condensation) Storage temperature and humidity: -40°C~+70°C, ≤95% (non-condensation)

**OCID MODULE**

<b>Measurement Method</b>	Single Fiber (No loop)
<b>Wavelength</b>	1550nm
<b>Test Distance</b>	60km or 120km Optional
<b>Cable Loss</b>	≤14dB @60km, ≤24dB @120km
<b>Waveform Display</b>	Support (in Real Time)
<b>Audio Sound</b>	Support (in Real Time)
<b>Initial Blind Zone</b>	No Blind Zone
<b>SNR</b>	> 10dB
<b>Fiber Type</b>	9/125 Single Mode Fiber
<b>Connector</b>	SC/APC and FC/UPC

**OTDR MODULE**

<b>Pulse Width</b>	3ns,5ns,10ns,50ns,80ns,160ns,320ns,500ns,800ns,1μs,3μs,5μs,8μs,10μs, 20μs
<b>Distance Range</b>	500m,1km, 2km, 4km, 8km, 16km, 32km, 64km, 128km, 256km
<b>Sampling Resolution</b>	0.05 to 16m
<b>Sampling Point</b>	16k to 128k points
<b>Linearity</b>	≤0.2dB/dB
<b>Averaging Time</b>	Setting by user
<b>Scale Indication</b>	X axis: 4~70m/div, Y axis: 0.09~5dB/div
<b>Distance Accuracy</b>	±(1m+measuring distance×3×10 <sup>-5</sup> +sampling resolution) (excluding IOR uncertainty)
<b>Loss Threshold</b>	0.01dB
<b>Loss Resolution</b>	0.001dB
<b>Distance Resolution</b>	0.01m
<b>IOR Setting</b>	1.0~2.0, 0.0001 step
<b>Units</b>	km
<b>OTDR Trace Format</b>	Telcordia universal, SOR, issue 2(SR-4731)

**VFL MODULE**

<b>Wavelength</b>	650nm
<b>Output Power</b>	10mw, CLASSIII B
<b>Range</b>	12km
<b>Launching Mode</b>	CW/1Hz/2Hz
<b>Adapter Type</b>	2.5mm Universal Adapter for FC SC ST Connectors

OPM MODULE		OLS MODULE	
<b>Wavelength</b>	850/980/1300/1310/1490/1550/1625/1650nm	<b>Laser Type</b>	FP-LD
<b>Test Range</b>	-70~+ 10dBm or -50~+ 26dBm (in default)	<b>Wavelength</b>	1310/1550nm
<b>Accuracy</b>	±0.35dB±1nW	<b>Output Power</b>	> -5dBm
<b>Modulation</b>	270/330/1k/2k Hz, Pi≥-40dBm	<b>Output Mode</b>	CW/270/330/1k/2k Hz

STANDARD PACKAGE		
1	OCID Host	1 SET
2	AC/DC Power Adapter	1 PC
3	U-DISC (containing analysis software)	1 PC
4	Data line	1 PC
5	Touch pen	1 PC
6	OTDR SC adapter 1 PC	1 PC
7	OPM SC adapter	1 PC
8	SC/APC-SC/UPC Cable	1 PC
9	User Manual	1 PC
10	Calibration certificate	1 PC
11	Clean cotton	10 PCS
12	Leather knob	1 PC
13	Special backpack for instrument	1 PC

ORDERING INFORMATION		
<b>FF-6800-AS1</b>	Optical Cable Identifier OCID	OCID Test distance: 60km, OTDR dynamic range: 30dB
<b>FF-6800-AS2</b>	Optical Cable Identifier OCID	OCID Test distance: 60km, OTDR dynamic range: 32dB
<b>FF-6800-AS3</b>	Optical Cable Identifier OCID	OCID Test distance: 60km, OTDR dynamic range: 36dB
<b>FF-6800-BS1</b>	Optical Cable Identifier OCID	OCID Test distance: 120km, OTDR dynamic range: 30dB
<b>FF-6800-BS2</b>	Optical Cable Identifier OCID	OCID Test distance: 120km, OTDR dynamic range: 32dB
<b>FF-6800-BS3</b>	Optical Cable Identifier OCID	OCID Test distance: 120km, OTDR dynamic range: 36dB

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Please visit the link for more pictures or video demo  
<https://www.firstfiber.cn/ff-6800-ocid.html>