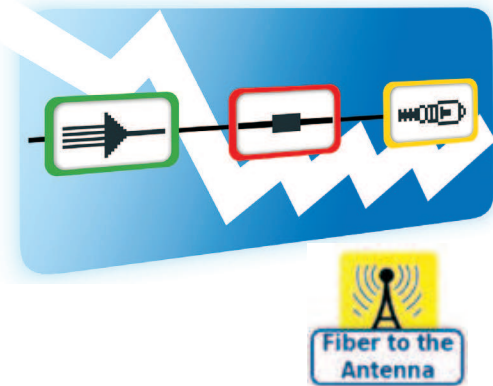


# FTTA-SLM application for T-BERD/MTS OTDR Platforms

## Empower Cell Tower Technicians to Become Immediate OTDR Fiber Test Experts

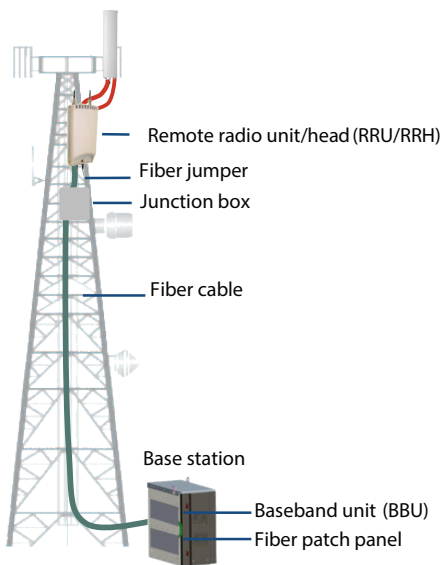


### Benefits

- Provides confidence in fiber-network performance
  - Qualifies installation quality for acceptance
  - Troubleshoots and locates breaks and problems
- Empowers field technicians to become instant OTDR fiber-test experts
  - Requires little to no optical fiber expertise to perform a test
  - Provides results in a schematic map for immediate diagnosis of problems understandable at any skill level
- Enhances field productivity
  - Completes the test process twice as fast and more reliably than any standard OTDR
  - Certifies the work with on-board PDF reports generation

### Key Applications

- Installation, maintenance, and troubleshooting of optical fibers in cell towers and rooftop sites



Fiber to the cell tower



### Optimize Your Network for Enduring Performance

Demand for bandwidth-intensive services by mobile subscribers continues to grow rapidly. To meet current and future demand for LTE services, providers are deploying fiber optic infrastructure to the top of cell towers and rooftop sites. Fiber testing is vital, especially with an OTDR, to provide confidence that the network is optimized to deliver reliable and robust services without faults.

### OTDR Testing Becomes Simpler for Broader Adoption

Frontline cell-tower technicians who are traditionally skilled in RF network installation must now qualify or troubleshoot fiber installations using an OTDR. This is a challenging step as an OTDR is often considered complex to operate and measurement results difficult to interpret. The FTTA-SLM application is field-installable software for T-BERD/MTS OTDR platforms that simplifies OTDR testing for cell-tower technicians.

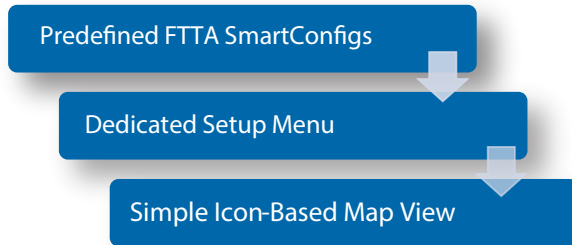
FTTA-SLM is the industry's first OTDR application that provides schematic functions for optical fiber testing related to cell-tower and rooftop-site installation and maintenance.

It is a field installable software license for JDSU T-BERD/MTS-2000, -4000, -6000, and -6000A platforms that is compatible with any multimode and single-mode OTDR.

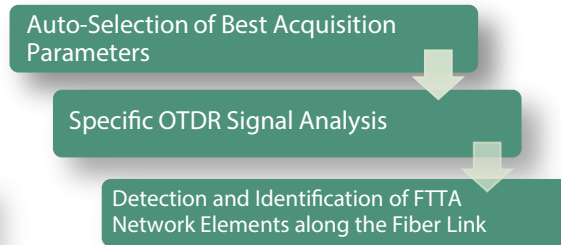
## A Test Solution Dedicated to the FTTA Environment

FTTA-SLM eliminates complexities of OTDR test setup and results interpretation. It provides a simple, icon-based map view of fiber in a custom language for FTTA networks. Now, any skill level of technician can understand and perform error-free tests.

### Special User Interface



### Special Analysis Software



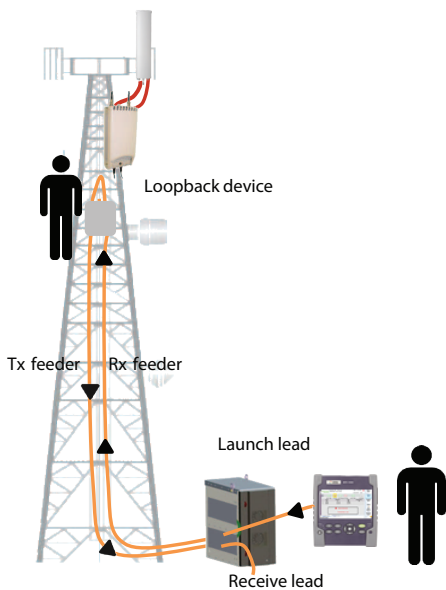
## Fiber Optic Cell Tower and Rooftop Site Testing with an OTDR

An OTDR is the only device that can characterize and measure fiber loss, measure the loss of each passive element on a link, and provide the distance to each one. It is also the only device that can locate and identify causes of failure on a fiber link.



### Acceptance Testing

One way to judge installation quality is to use a loopback device (a retractable/expandable fiber leash cable or a patchcord) on duplex fiber to test at the junction box or RRU location and shoot with an OTDR from the BBU or fiber-patch panel location to qualify the entire fiber channel.



Fiber cell-site acceptance testing example

	BOT TWR	TOP TWR	TOP TWR	BOT TWR	70.36
Laser nm	Distance m	Loss dB	Reflectance dB		
1310	25.22	0.779	-45.64		
1550	25.21	0.763	-43.23		
1625	25.04	0.686	-41.78		

**✘ Bad or dirty connector**  
**Connector Loss too high**  
 Threshold Reflectance : > -35 dB  
 Threshold Connector Loss : > 0.50 dB

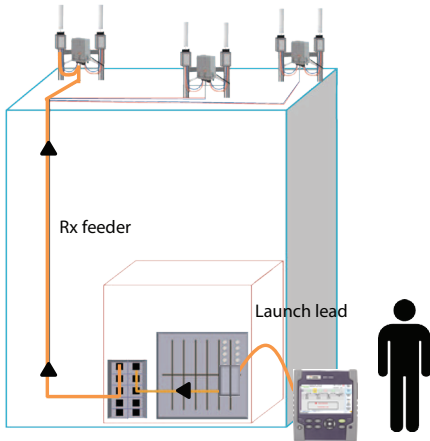
SM-OTDR

### FTTA-SLM:

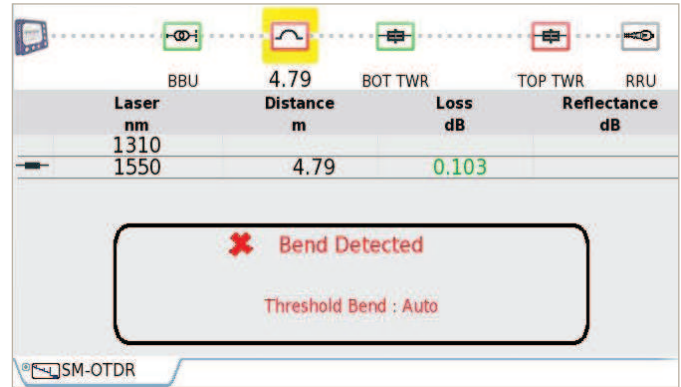
- Measures and displays total fiber-link loss
- Measures and displays connector loss and reflectance
- Detects installation issues (bends/kinks, bad or dirty connections) and provides a clear diagnostic

## Troubleshooting

An OTDR from the BBU or fiber patch panel location will troubleshoot the fiber link up to the RRU.



Fiber rooftop-troubleshooting example

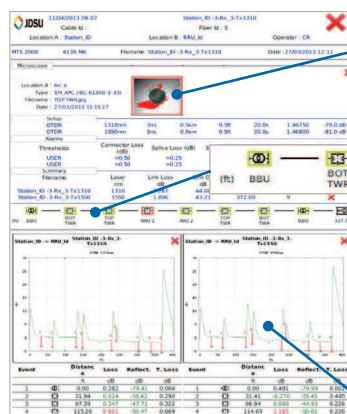


### FTFA-SLM:

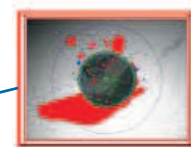
- Detects and locates breaks
- Detects issues (bends/kinks, bad or dirty connections)

## Easy and Fast Certification-Report Generation

A certification report provides documented, authentic proof of the quality of an installation. JDSU T-BERD/MTS handheld modular platforms are ideal field testers that let users inspect fiber connectors as well as test and certify any fiber connector and fiber link according to international standards. Comprehensive pass/fail PDF summary reports can be instantaneously generated on-board.

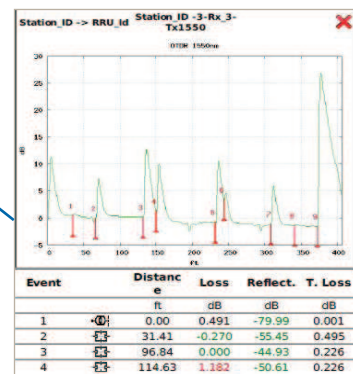


Certification-report example



Fiber-end connector picture

### FTFA-SLM results



OTDR results

# FTTA-SLM application for T-BERD/MTS OTDR Platforms

## Ordering Information

New Configuration	Description
ESMARTFTTA-2K	FTTA-SLM application for T-BERD/MTS-2000
ESMARTFTTA-4K	FTTA-SLM application for T-BERD/MTS-4000
ESMARTFTTA-6K	FTTA-SLM application for T-BERD/MTS-6000 (s/n $\geq$ 10000)/-6000A

Upgrades	Description
ESMARTFTTA2KUPG	FTTA-SLM upgrade application for T-BERD/MTS-2000
ESMARTFTTA4KUPG	FTTA-SLM upgrade application for T-BERD/MTS-4000
ESMARTFTTA6KUPG	FTTA-SLM upgrade application for T-BERD/MTS-6000 (s/n $\geq$ 10000)/-6000A
EFLMM20M-LC-LC	20 m 50 $\mu$ m multimode cable leash LC/PC to LC/PC
EFLSM20M-LC-LC	20 m single-mode cable leash LC/PC to LC/PC



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