

A woman with long dark hair, wearing a grey patterned top, is in a server room. She is holding a silver laptop in her left hand and pointing with her right index finger at a server rack. The server racks are filled with various hardware components, and blue cables are visible at the top. The background shows more server racks and a blue-tinted environment.

Data center test solutions >

EXFO

Data center infrastructure validation



Fiber inspection



Fiber certification



MPO fiber certification



Fiber characterization



Link verification



Fiber tracing



Handheld power meter



Transceiver validation



Cable validation



Traffic generation



Coherent link validation



Data center test solutions





Damaged/dirty connectors

Inspect any type of fiber inside the data center, including single- or multi-mode and single- or multi-fiber

Fastest LC and MPO connectors inspection with the same tool

FIP-500 is 100% automated fiber inspection scope with quick connect mechanism for easy tip swap and zero button operation

View of all multifiber and LC duplex connectors in one shot with pass/fail diagnostics visible from any angle

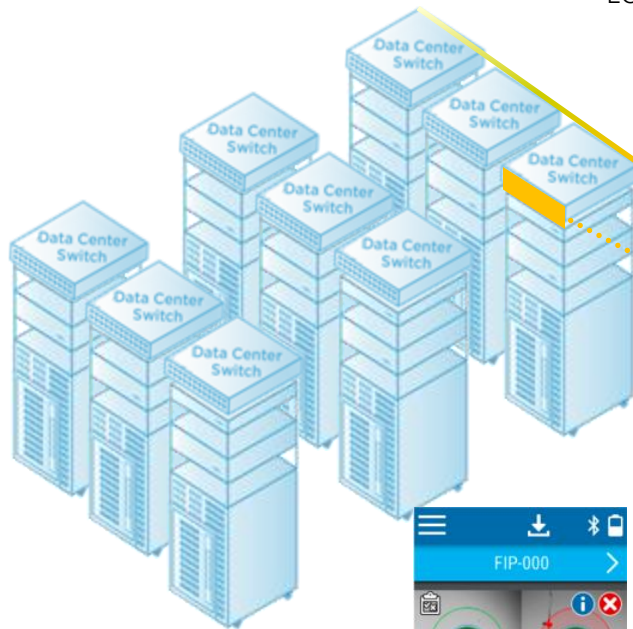


LC



MPO

PASSED FAILED



LC duplex



MPO



FIP-500



Fiber certification

Tier-1 duplex fiber certification

Certify any enterprise data center network as per international standards (TIA-568, ISO 11801)

Leading FasTest™ performance certifies two fibers at two wavelengths in 2.6 seconds

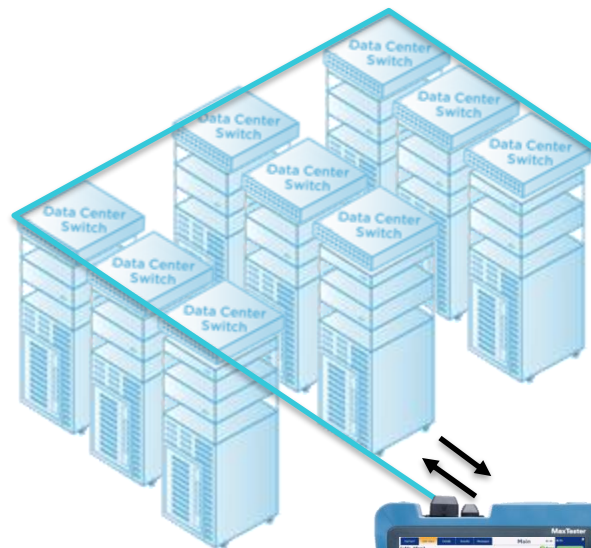
Onboard assistant and diagnosis for elimination of reference errors and negative loss

Built-in Encircled-Flux compliance as per ANSI/TIA and ISO/IEC

3-year calibration interval



FASTEST



MaxTester 940



MaxTester 940

2 fibers
2 wavelengths
2.6 seconds



MPO fiber certification

Tier-1 MPO fiber certification

Leading FasTest™ performance: test MPO-12 cables at 2 wavelengths in just 1 second

Comprehensive pass/fail results on one page displayed on a 4-inch color touchscreen

Insertion loss measurement

Polarity type validation

Native MPO-12 connector on devices

In-line visual fault locator (VFL) for fiber tracing



FASTEST



PXM

12-fiber MPO test
2 wavelengths
1 second



LXM



Tier-2 certification

Certify any enterprise data center network as per international standards (TIA-568, ISO 11801)

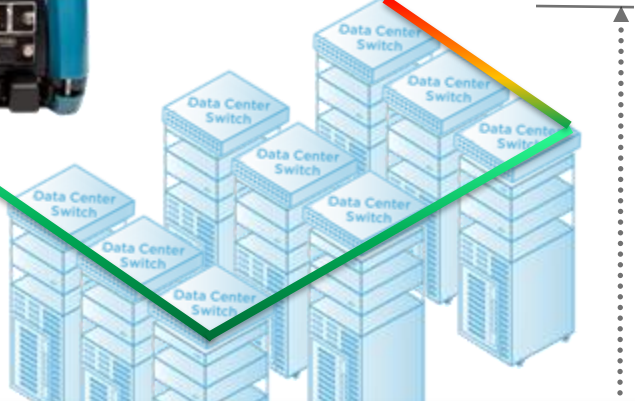
Validate the fiber to ensure it meets critical performance attributes with automated pass/fail thresholds for singlemode and multimode cables

iOLM dynamically locates and identifies all faults with maximum resolution

Test, in automated sequence, the individual fibers of an MPO (singlemode) connectorized cable, inside or outside the data center



FTBx-720C





Link verification

Broken or faulty fibers

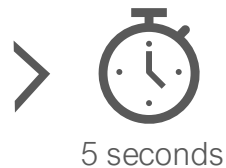
Faulty fibers are among the most serious issues in structured cabling networks

Checks the power level

Displays fiber length, loss and optical return loss (ORL) in under 3 seconds

EXFO's Optical Explorer validates link quality in seconds, assigning a 1-5 star rating according to industry best practices

On-the-spot detection and location of common causes of failures on singlemode fibers





Fiber tracing

A triple test tool – Live fiber identifier, live fiber detector, dark fiber identifier – for truly efficient fiber management

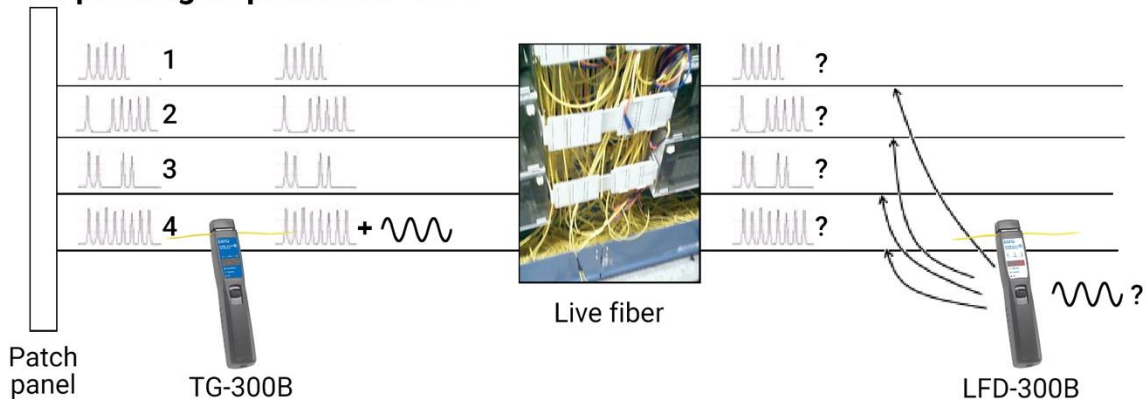
Pinpoints a specific live fiber using EXFO's FiberFinder™ functionality

Induces minimal loss: ≤ 1 dB

Test cycle under 6 seconds



Pinpointing a specific live fiber





Handheld power meter

Handheld power meter

User-friendly: Compact, color touchscreen and intuitive interface

Robust and rugged: IP54 design for dust and water protection

Connect to smart app via Bluetooth for easy data reporting

Data storage

3-year calibration interval



Optical Power Expert (PX1)



 Bluetooth®

Optical Power Expert



Defective transceivers

Transceivers are critical to data center operations

Faulty transceivers are among the most common and serious issues in data center networks

Most technicians do not have the tools to identify defective transceivers

EXFO's iOptics enables data center technicians to quickly validate transceivers on-site and meet aggressive deployment schedules. iOptics generates a test report that technicians can use to show the transceiver vendor which elements are failing.



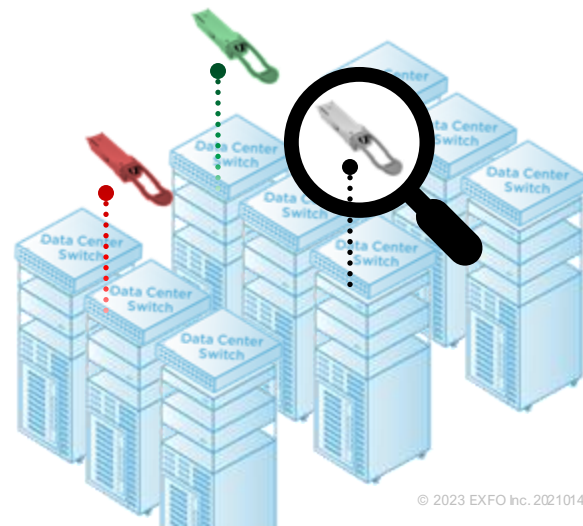
FTBx-88260



2 minutes

PASSED ✓

FAILED ✗





Cable validation

Defective AOC cables

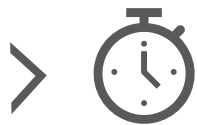
Active optical cables (AOCs) are being widely deployed in high-performance computing and data center applications

Identifying faulty cables inside the data center is one of the most difficult tasks data center technicians face

EXFO's iOptics intelligent pluggable optics test application offers a complete, powerful and easy-to-use tool for validating AOC cables. iOptics generates a test report that technicians can use to show the transceiver vendor which elements are failing.



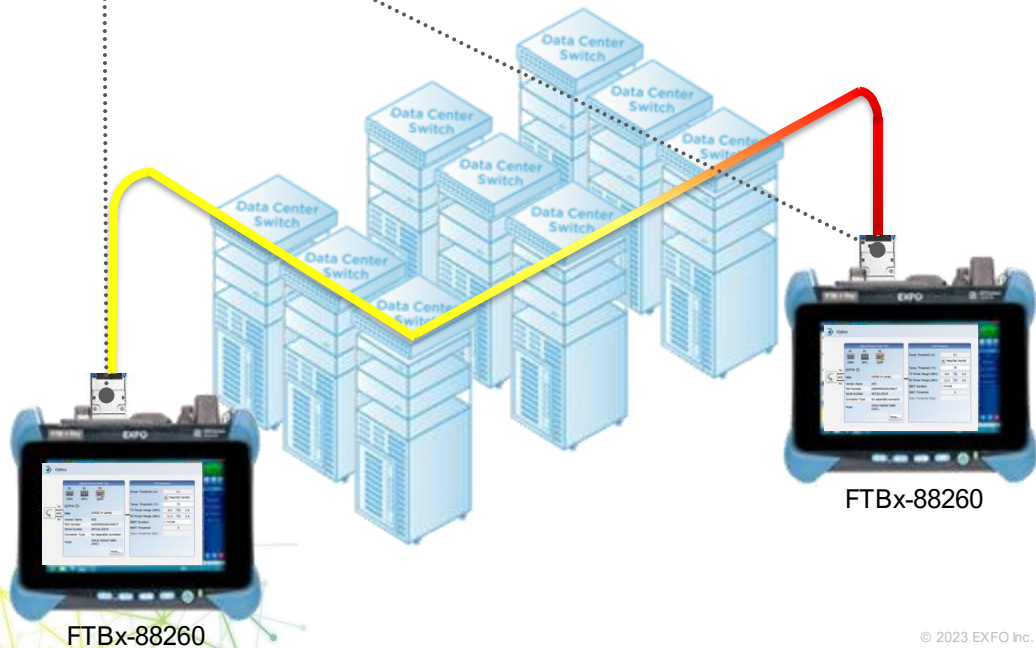
iOptics



2 minutes

PASSED ✓

FAILED ✗





Traffic generation

Data performance challenges

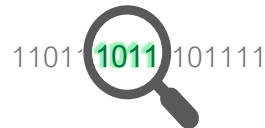
Data transmission between servers, switches and users is the most important activity in any data center

Validating end-to-end signal integrity, zero packet loss and minimal latency during deployment and troubleshooting is critical for data center managers

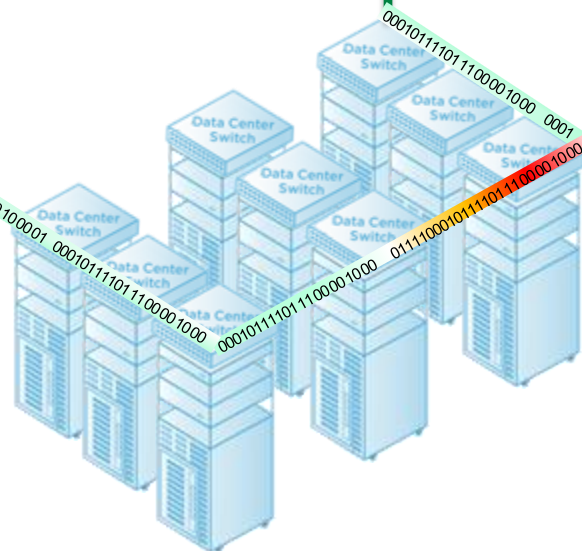
EXFO's BERT, traffic generation, RFC 2544 and EtherSAM Y.1564 applications help data center technicians validate on-site data transmission performance, complete their fiber installations and quickly troubleshoot issues



FTBx-88480



FTBx-88480





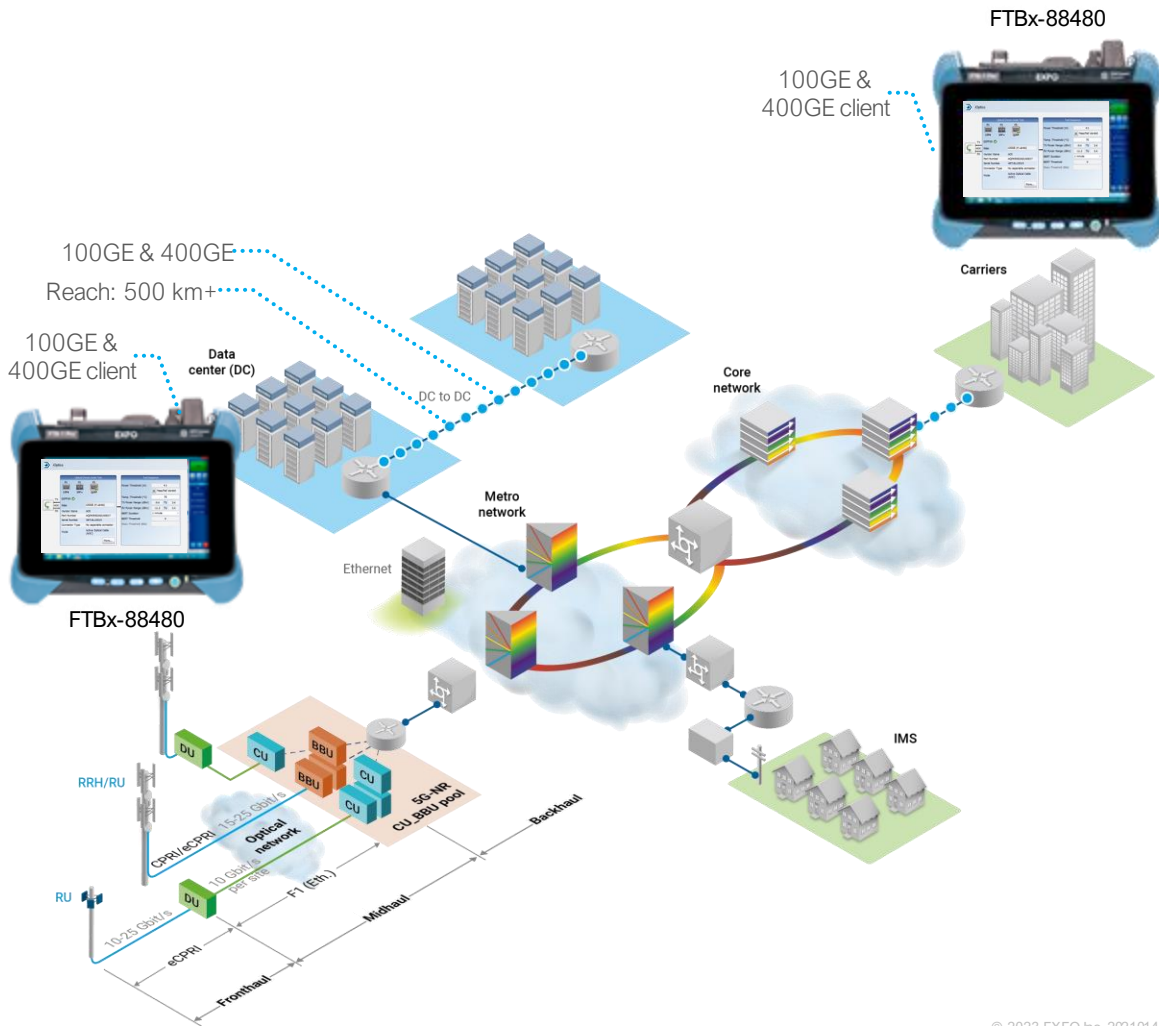
Coherent link validation

Meet all specifications

Coherent links between data center sites can range from 120 km to over 500 km using different standards such as 400ZR or OpenZR+

Coherent links must be validated to make sure that they are stable, meeting bit error rate specifications. Furthermore, coherent transceivers offer multiple optical metrics that should be assessed as per the network planning requirements.

EXFO's FTBx-88480 allows validation of coherent transceivers and links, including the configuration of frequency and output power. Technicians can assess the optical metrics and make sure that all elements meet the specifications.





Data center test solutions



FTBx-88260 multiservice tester

Ethernet testing from 10M up to 100G

Open transceiver system (OTS): supports current and future transceiver technologies, including coherent ZR/ZR+ optics

iOptics: intelligent transceiver and AOC validation from 10M up to 100G



MaxTester 940

Tier-1 duplex fiber certification of two fibers at two wavelengths in 2.6 seconds



Optical Power Expert (PX1)

Power meter with Bluetooth® connectivity and a wide touchscreen



FTBx-88480 compact dual-port 400G field tester

Supports different rates, interfaces and transceiver types—all with a single platform. It also features the OTS and iOptics.



FIP-500

100% automated fiber inspection scope



PXM/LXM MPO OLTS

Tier-1 MPO fiber certification



FTBx-700 Series OTDR with iOLM

Automated, expert-level singlemode and multimode fiber testing, removing complexity from the OTDR



Optical Explorer (OX1)

Ultrafast link verification and embedded fault tracking



LFD/TG-300B FiberFinder

Live fiber identifier/tone generator