

Data center test solutions >

EXFO

# Data center infrastructure validation



Fiber inspection



Handheld power meter



Fiber certification



Transceiver validation



MPO fiber certification



Cable validation



Fiber characterization



Traffic generation



Link verification



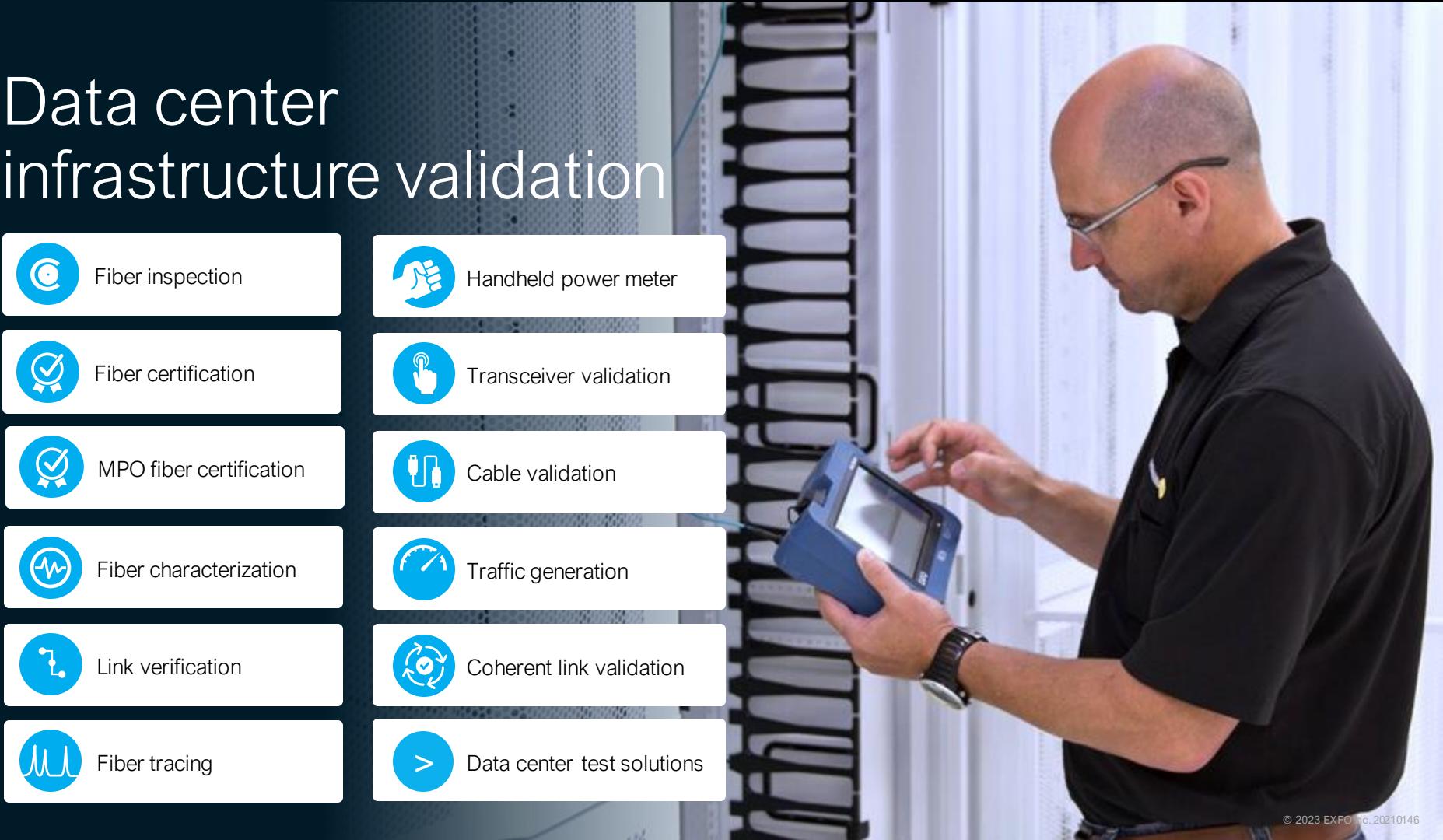
Coherent link validation



Fiber tracing



Data center test solutions





## Fiber inspection

# 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





## Fiber certification

# Tier-1 duplex fiber certification

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

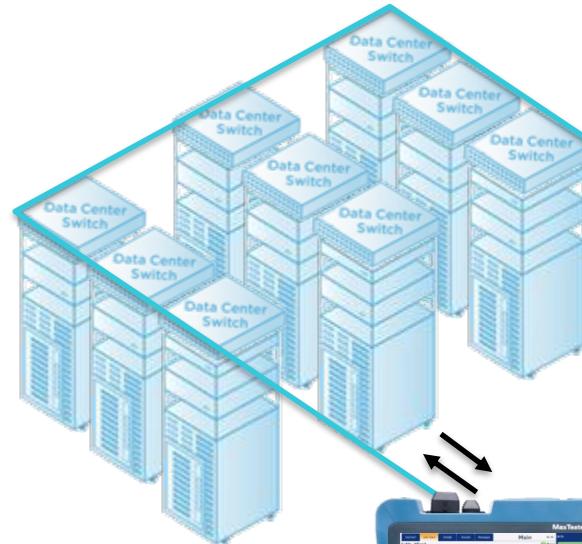
Leading FasTest™ performance certifies two fibers at two wavelengths in 2.6 seconds

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 warranty and calibration interval

**FASTE**  
TEST



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

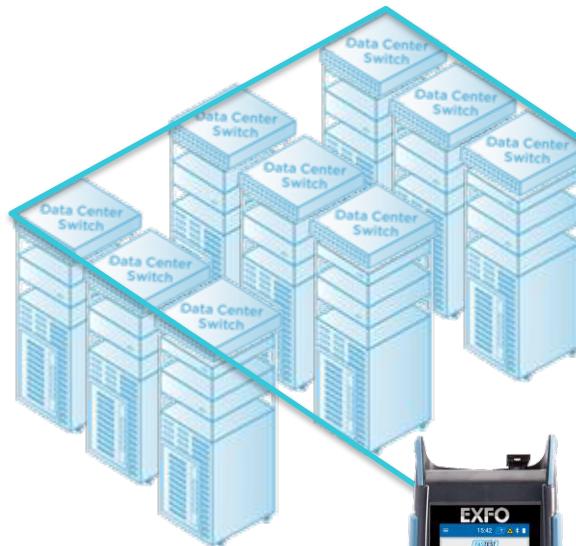
Insertion loss measurement

Polarity type validation

Native MPO-12 connector on devices

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

FASTEST



LXM



PXM

12-fiber MPO test  
2 wavelengths  
1 second





## Fiber characterization

# Tier-2 certification

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

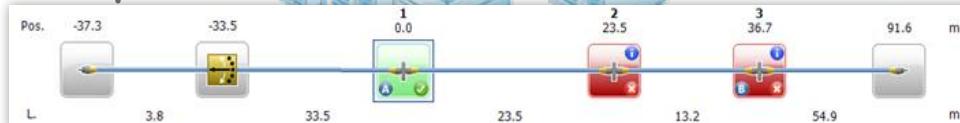
Validate the fiber to ensure it meets critical performance attributes with automated pass/fail thresholds for singlemode and multimode cables

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

**iOLM** | intelligent Optical Link Mapper

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



5 seconds





# Fiber tracing

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

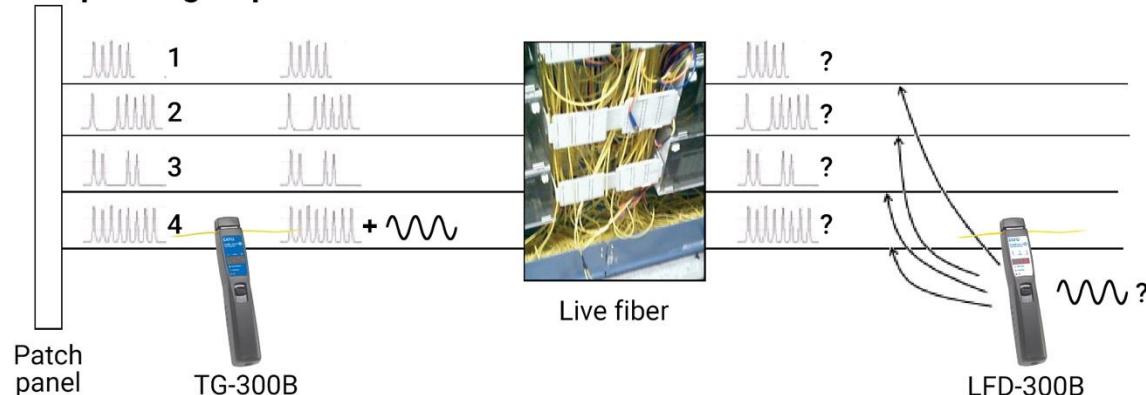
Pinpoints a specific live fiber using EXFO's FiberFinder™ functionality

Induces minimal loss:  $\leq 1$  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 warranty and calibration interval

Optical Power Expert (PX1)





## Transceiver validation

# Defective transceivers

Transceivers are critical to data center operations

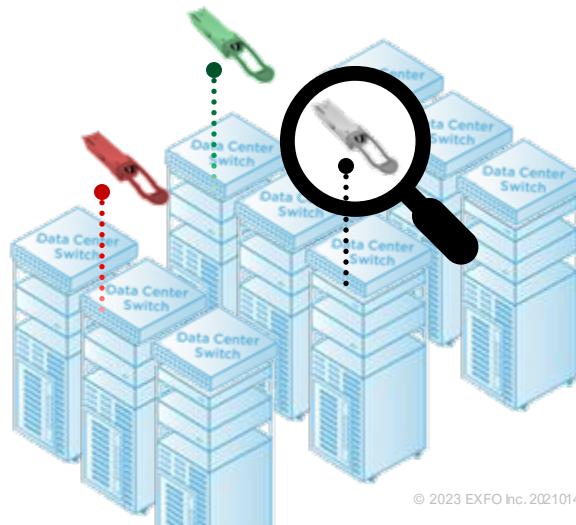
Faulty transceivers are among the most common and serious issues in data center networks

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.



PASSED   
FAILED





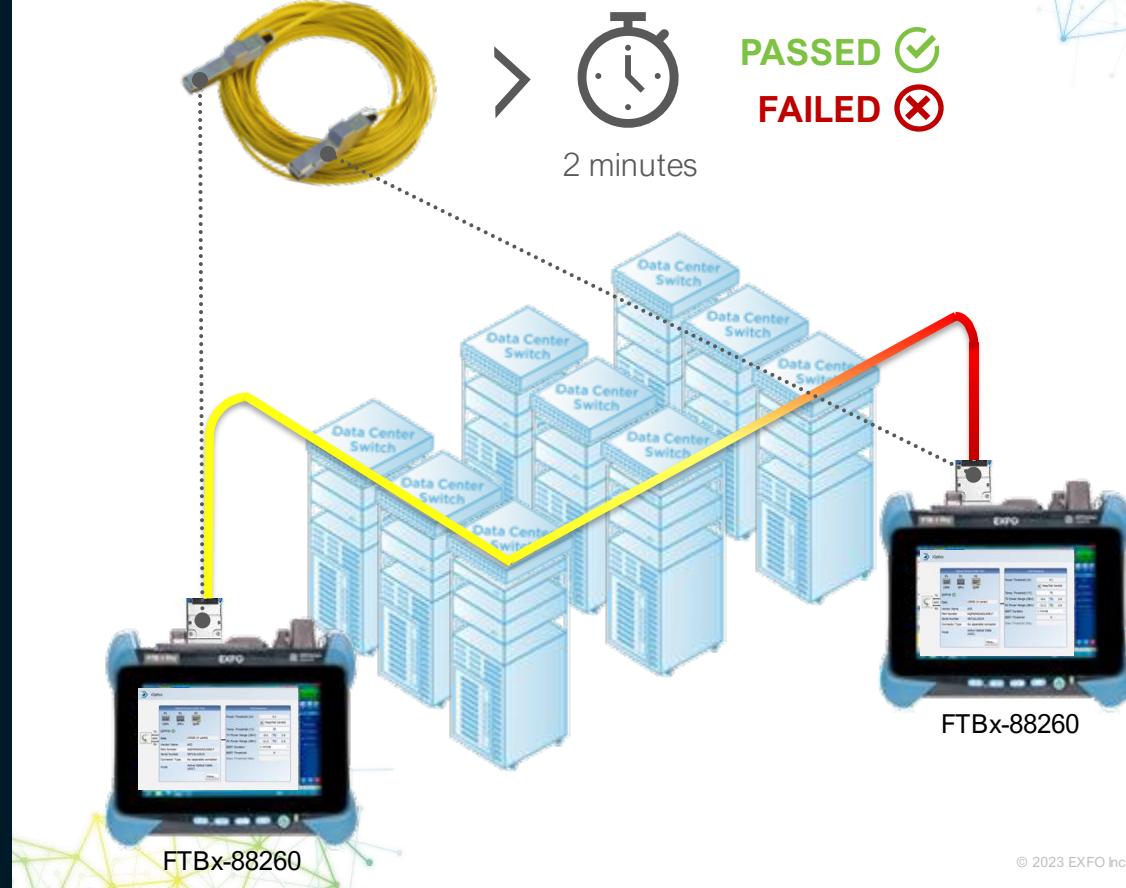
## Cable validation

# 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.





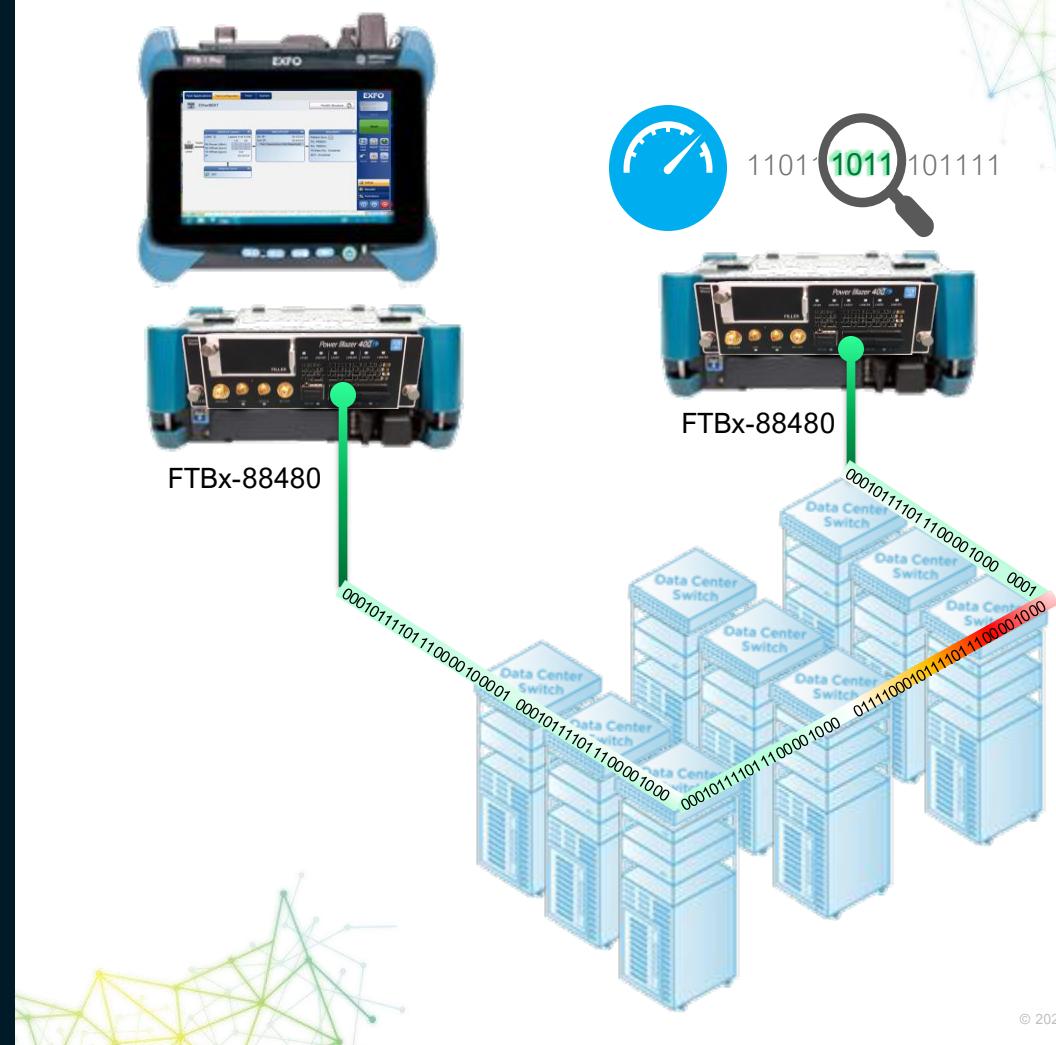
## Traffic generation

# 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





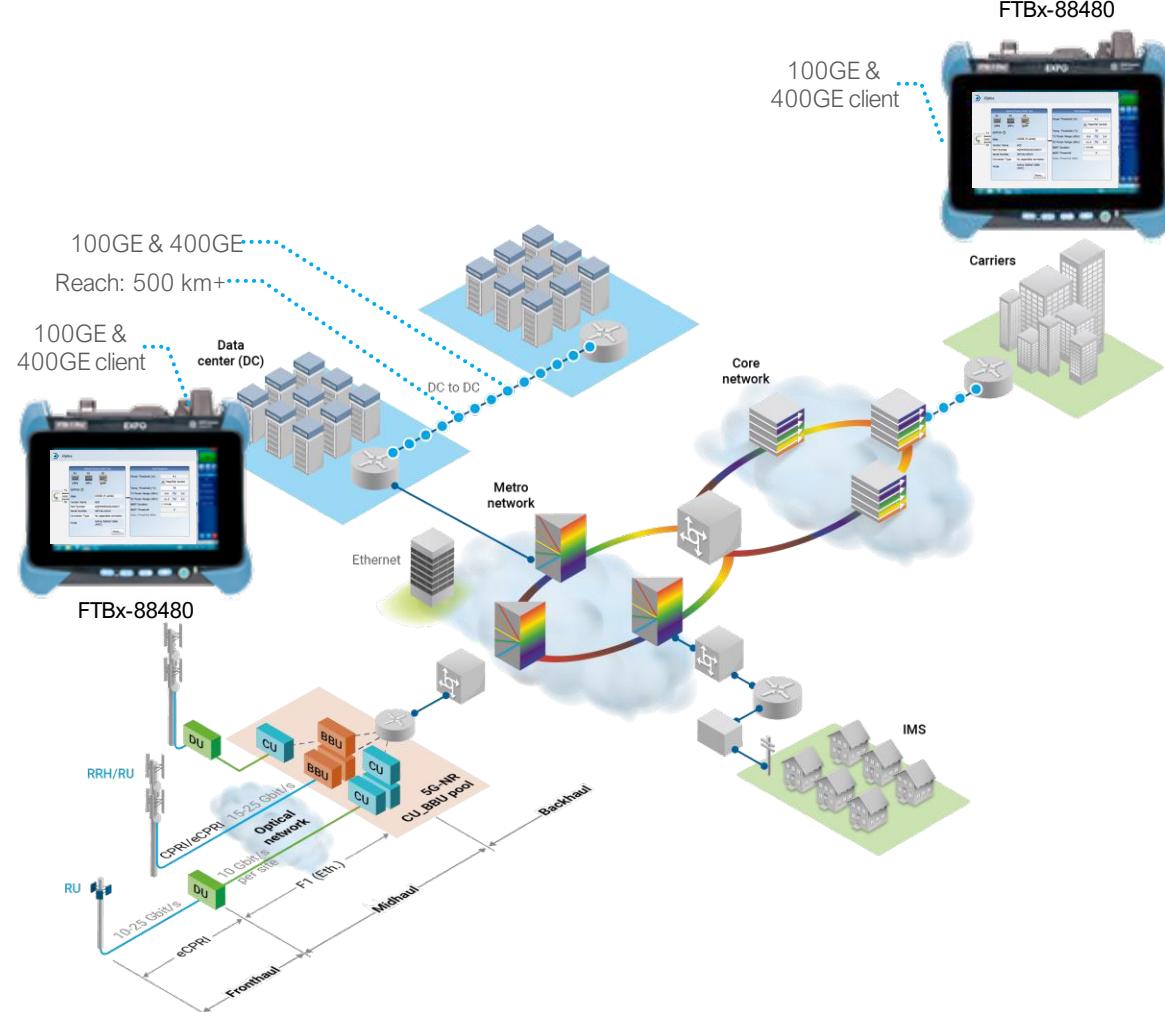
## Coherent link validation

# 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

**FASTEST**



## 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