

# Frequently asked questions – FAQ

## AXS compact OTDR series



### 1. Does the default OLM available perform the same functions as iOLM?

No, the choice between OLM and iOLM will depend on the specific needs and testing requirements of the user.

- The iOLM offers a completely automated acquisition sequence with intelligent algorithms, use of multiple pulse widths, and automatic link characterization.
- With OLM, the classic acquisition workflow of the OTDR remains the same, but also provides an iconographic representation of the OTDR trace that facilitates its reading by beginner users. This helps them learn faster how to work with the OTDR. OLM provides the SOR file for the birth certificate.

#### intelligent Optical Link Mapper (iOLM)



Multiple wavelengths

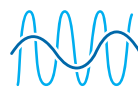


Clear consolidated link display



Fits your processes

#### Optical Link Mapper (OLM)



Multiple wavelengths



Clear consolidated link display



Fits your processes

Bringing the intelligence in iOLM...



Intelligent algorithms



Adaptive test settings



Multipulse acquisitions

### 2. Is iOLM available on the AXS series?

Yes. A version of iOLM designed for FTTH technicians is available on SM7 and SM8 models of the AXS-130 only.

### 3. What is FTTH-iOLM?

An automated multipulse acquisition for live fiber to ensure a clear diagnostic of all elements along the FTTH link under test.

#### 4. Can this unit be connected to the cloud? If yes, how?

The AXS series can be connected free of charge via EXFO Exchange, EXFO's trusted cloud-hosted solution that drives an entire ecosystem while integrating seamlessly with existing operation processes. Efficiently manage test data and compliance with EXFO Exchange, empowering field technicians and managers with real-time visibility for faster job completion.

#### 5. What is the recommended calibration period for the AXS compact OTDR?

As per industry standards, EXFO recommends a calibration period of one year. However, users may determine the calibration interval according to actual instrument use and their acceptable level of inaccuracies.

#### 6. How long is the calibration validity for AXS units during the stockage period?

The AXS calibration remains valid for 12 months during the stockage period, making it highly beneficial for our stocking distributors. This is on top of the 1-year calibration validity once the unit is put into service. This applies to all AXS compact OTDR models.

#### 7. Lifetime calibration is offered with the Optical Explorer (OX1). Will it be offered for the AXS series as well?

No. OX1 measurements help verify and troubleshoot optical links, unlike AXS OTDR measurements, which provide the full characterization of optical links. This characterization must comply with international standards and so periodic calibration is necessary for OTDRs to ensure minimal uncertainties over time.

#### 8. Why add an in-line power checker to all AXS series OTDRs?

A power checker is an essential tool for frontline technicians. It can be used to identify a fiber with a tone, or to check the power level of the signal before troubleshooting. Moreover, troubleshooting jobs often start with a power level measurement, and if needed, the OTDR test is done to identify the root cause of the issue. Having it on the same port as the OTDR (i.e., in-line) streamlines the workflow, as the technician can perform both steps without disconnecting the fiber.

#### 9. What is the difference between a power checker and a power meter?

The in-line power checker included on the AXS series OTDRs has an uncertainty of  $\pm 0.5$  dB and fulfills nearly 80% of use cases. Standalone power meters or mainframe built-in power meters are more precise, with an uncertainty of  $\pm 0.2$  dB, but come with a higher price.

#### 10. Why is a Swap-Out connector helpful?

OTDR connectors get damaged over time with mating/unmating cycles, impacting optical performance (longer dead zone, reduced dynamic range). EXFO's Swap-Out connector allows for quick on-site replacement of the damaged connector without the need to send the device to an EXFO service center.

#### 11. Are AXS Swap-Out connectors interchangeable with Swap-Out connectors on the 700D-series OTDRs or the Click-Out connectors on the OX1?

No. Each product line has its own specific connectors. The OX1's Click-Out connectors are not compatible with OTDRs and vice versa. The same applies for the D-series Swap-Out connectors.

## 12. Will Swap-Out connectors change the recommended calibration period?

No. The recommended calibration period is still one year for the AXS series OTDRs. Calibration minimizes measurement uncertainty by ensuring the accuracy of test equipment, especially for distance measurement.

## 13. Is it ok to mate a UPC connector with an APC connecting port on the unit?

An UPC connector should NEVER be mated with an APC connecting port or vice versa. However, with Swap-Out connectors, this type of honest mistake doesn't bear such a toll on the user or owner. The connector can simply be replaced on the spot in a matter of seconds, with minimal impact.

## 14. Will Swap-Out connectors allow me to go from UPC to APC?

No, successive mating/unmating cycles are likely to damage the internal connection, with irreversible degradation of performance. It is recommended to replace the Swap-Out connector for repair only, when necessary. To test an UPC cable with an APC unit, it is still recommended to use a hybrid jumper cable.

## 15. How do I know when it's time to replace the Swap-Out connector?

This is no longer problematic: an onboard step-by-step diagnosis wizard indicates the optical output health of the connector. Connector replacement can now be done only as and when needed.

## 16. Do units need to be sent back for immediate calibration after the Swap-Out connector is replaced?

No. The replacement of traditionally fixed connector requires recalibration, which adds extra cost to the operation. EXFO's Swap-Out design does not require any recalibration. However, the scheduled calibration date should remain the same after a swap operation.

## 17. What are the differences between the AXS-120 and the AXS-130?

- The AXS-130 can test both live and dark fiber, whereas the AXS-120 only tests dark fiber.
- The dynamic range of the AXS-130 is 42/40/39 dB, an improvement over the 35/33 dB dynamic range of the AXS-120.
- iOLM is available on the AXS-130 (SM7 and SM8 models), but not on the AXS-120.

## 18. What is the PON Optimized Mode?

This mode allows the user to enter the splitters on the optical link. The analysis automatically associates the correct splitter to the appropriate event on the trace. The Auto Mode is also optimized for PON links.