

Optical Switch Box for OTDR

AQ3550

OTDR controlled optical switch to simplify production and installation of multi-fiber SMF\*1 cables

A 12-channel optical switch box that effectively improves workability with YOKOGAWA OTDRs. Controlled from an OTDR, the OSW allows continuous measurement of all or a subset of the 12 channels. The compact size makes this an ideal solution to conveniently measure multiple ribbon fibers in the field or conserve production test rack space.

Overview

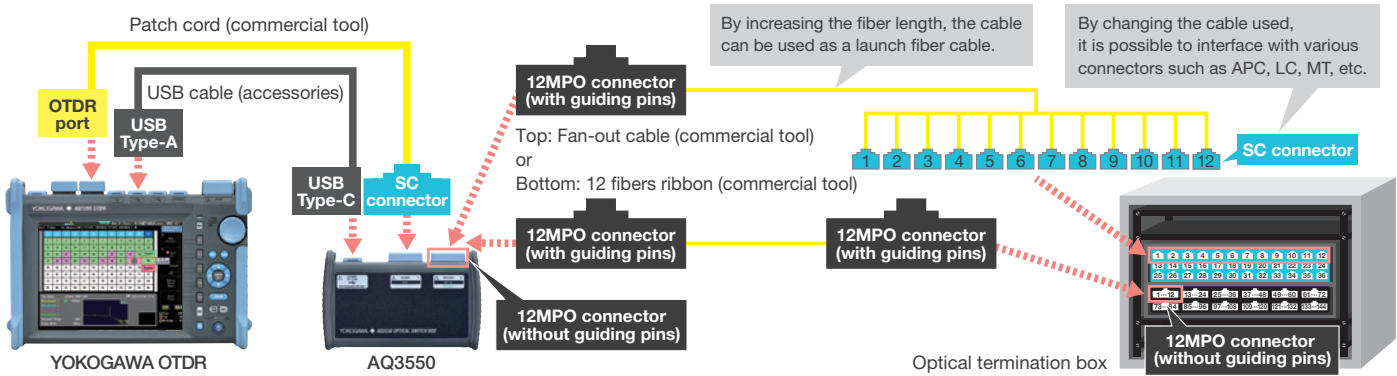
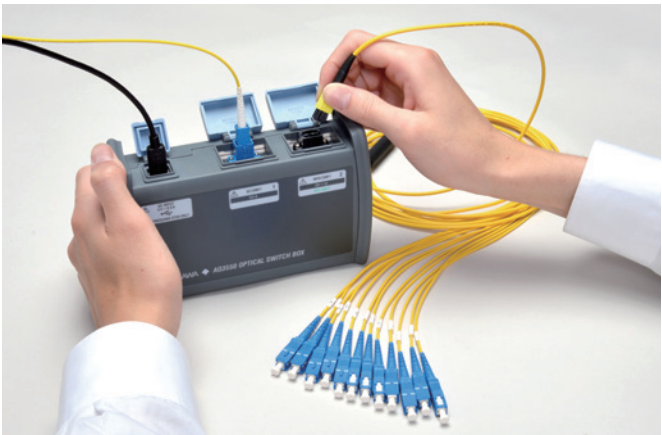
- Palm-sized for carrying convenience
- Powered by OTDR USB port
- Easily controlled by OTDR

Main applications

- Optical fiber and cable manufacturing
- R&D of optical fibers and cables
- Installation of multi-fiber cables

Example of use with Yokogawa OTDRs

Menu name	Example of use
OTDR	Continuous measurement of multiple cables while checking the trace
Multi Fiber Project	Continuous measurement of multiple-fiber cables while checking the fiber numbers on the management table
Schedule Measurement	Fixed-period monitoring of multiple cables
—	Remote control from a PC using communication commands*2



# Major specifications

Items		Specifications
Port configuration		1×12
Number of switch		1
Wavelength		1260 to 1650 nm
Insertion loss		2 dB typ. (2.5 dB max.)
Repeatability <sup>*1</sup>		±0.02 dB or less
Optical return loss <sup>*1, *2, *3</sup>		40 dB or more
Applicable optical fiber <sup>*4</sup>		SM (ITU-T G.652, G.654, G.657)
Optical connector		Input: SC/PC, Output: MPO (Angled-PC without guiding pins)
Switching life cycle		10 million cycles
Interfaces		USB 2.0 Type-C: DC power supply, remote control
Power requirements		USB power supply from OTDR mainframe
Environmental conditions	Operating temperature	−5 to +50°C
	Storage temperature	−20 to +60°C
	Humidity	90% RH or less (non-condensing)
	Altitude	4000 m or less
EMC	Emission	EN 61326-1 Class A Group 1
	Immunity	EN 61326-1 Table2
Dimensions		Approx. 185 mm (W) × 116 mm (H) × 56 mm (D) (excluding projections)
Weight		Approx. 380 g

Note. All specifications have a constant temperature and a warm up time of 5 minutes.  
If there is no notification on the connector, the definition includes the connector.  
All specifications are valid at 23°C±2°C, unless otherwise specified.

- <sup>\*1</sup> Wavelength: 1310 nm±15 nm, 1550 nm±15 nm  
<sup>\*2</sup> When using the Yokogawa reference master cord  
<sup>\*3</sup> When using the equivalent of an UPC connector  
<sup>\*4</sup> Only ITU-T G.652 is guaranteed

# Model and suffix code

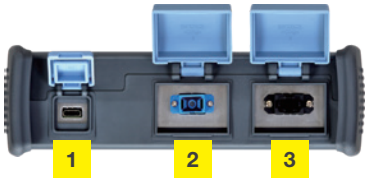
Model	Suffix	Descriptions
AQ3550		Optical Switch Box
Port configuration	-112	1×12
Optical fiber	-SA	SMF
Optical connector	-SCC	SC/PC

Standard accessories: A1752WL USB cable, User's Manual  
\*Use the USB cable by connecting the Type-A side to the OTDR and the Type-C side to this product.  
\*For measurement, an optical cable from an OTDR port to the input port and a fan-out cable from the output port to the cable under test are required. Please prepare commercial cables.

# Accessories (Sold separately)

Model	Suffix	Descriptions
A1752WL		USB cable (Type-A to Type-C, 1 m)

# Interfaces



- 1 USB port Type-C
- 2 Input port (SC/PC connector)
- 3 Output port (MPO connector (Angled-PC without guiding pins))

# Related products

## AQ7280 OTDR

This modular OTDR allows a user to freely swap between 14 types of OTDR units, 5 types of optical power meter and visible light source modules.



<https://tmi.yokogawa.com/p/AQ7280>

## AQ1210 OTDR

Handheld OTDR with excellent PON measurement performance, useful for identifying complex routes. It supports wireless remote control.



<https://tmi.yokogawa.com/p/AQ1210>



This is a Class A instrument based on Emission standards EN61326-1, and is designed for an industrial environment.  
Operation of this equipment in a residential area may cause radio interference, in which case users will be responsible for any interference which they cause.

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## NOTICE

- Before operating the product, read the user's manual thoroughly for proper and safe operation.



**YOKOGAWA TEST & MEASUREMENT CORPORATION**  
Global Sales Dept. /E-mail: [tm@cs.jp.yokogawa.com](mailto:tm@cs.jp.yokogawa.com)

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