



Latest Portable OTDR Portfolio

Optical Time Domain Reflectometer Selection Guide



Precision Making

Bulletin OTDR-01EN



Select from features and size

Large screen model for easy viewing of waveforms

Improved OTDR performance and connectivity!

YOKOGAWA's high-end model OTDR supporting the next generation communication network

High-end model OTDR

AQ7290 Series

Simple OTDR function

A simple screen allows for setup and measurement, a pop-up window assists on saving and other tasks after measurement.

Remote control

By using a commercially available wireless LAN adapter and Wi-Fi router, OTDRs can be operated remotely. This allows to operate and check OTDRs in the field from the office or home, it is ideal for business support by veterans and saving labors.



Modular and large screen offering the most configuration flexibility

Modular OTDR

AQ7280 Series

Wide range of module lineup for various applications

The product can be used for a wide range of applications, from a high dynamic range model suitable for long distance measurement to a model with a wavelength of 1490 nm used for FTTH installation confirmation and a model for manufacturing applications.



Compact and lightweight handheld model

Midsize non-modular robust platform, small enough to be operated easily with one hand!

Multi Field Tester OTDR

AQ1210 Series

Compact but long-hour operation

This compact OTDR is A5 size and weighs only 1 kg.

With 10 hours of battery operation, there is no need to worry about running out of battery power throughout a day's work. Smart and fully-featured, now includes multitasking.



Most compact OTDR

Entry level OTDR

AQ1000 Series

Simple tablet-like touchscreen icon menu making it perfect for beginners.

Affordable model with a full range of essential functions for access network construction.



YOKOGAWA OTDR function comparison

● Standard ○ Option

Items	AQ7290	AQ7280	AQ1210	AQ1000
Dimensions (W) × (H) × (D) mm	287 × 210 × 80	287 × 210 × 80	210 × 148 × 69	185 × 116 × 56
Weight	2.6 kg	2.8 kg	1 kg	660 g
Display	Size	8.4-inch	8.4-inch	5.7-inch
	Touchscreen	●	●	●
Battery operation	15 hours	15 hours	10 hours	10 hours
Power supply	USB Power adapter	AC adapter	USB Power adapter	USB Power adapter
Wired LAN	○	○	●*2	—
Wireless LAN	●*1 File transfer Remote control	●*1 File transfer	●*1 File transfer Remote control	○
Multi-fiber measurement	●	●	●	—
Smart Mapper	●	○	●	—
Multi-tasking	●	●	●	—
Stabilized light source	●	○	●	●
Power checker	○	○	○	●
Optical power meter	○	○	○	—
Visible light source	○	○	○	○
Fiber surface test*1	Image display	●	●	—
	Automatic judgment	○	○	—
Auto/Multi-fiber loss test	●	—	●	—
Schedule function (Monitoring)	○	○	—	—
Momentary interruption monitoring	—	○*3	—	—

*1 For information of Verified Products, please visit:
<https://tmi.yokogawa.com/p/otdr/>

*2 Integrated optical power meter

*3 /LAN option and AQ7940 Optical Fiber Monitoring Software are required.



YOKOGAWA OTDR model map

For fiber optic installation

Cable type	Target network			Test application				
	Area*1		PON	Installation (measurement of new and dark fiber)		Installation/Maintenance (measurement of new and live lines)		
				Model	Wavelength (nm)	Model	Wavelength*2 (nm)	
Single-mode optical fiber cable	Access	32	1 × 32	AQ1000	—	1310 1550		
		dB		AQ7282	G	1310 1550 1490		
		37	1 × 64	AQ1210	A	1310 1550	AQ1210	E 1310 1550 1625
				AQ7292	A	1310 1550		
	Access/Metro	42 dB	1 × 64	AQ7283	K	1310 1550 1625 1490	AQ7283	E 1310 1550 1625
				AQ1215	A	1310 1550	AQ1215	E 1310 1550 1625
		39	1 × 128	AQ7293	A	1310 1550	AQ1215	F 1310 1550 1650
				AQ7293	H	1310 1550 1625	AQ7293	F 1310 1550 1650
	Metro/Core	47 dB	—	AQ7294	A	1310 1550		
				AQ7294	H	1310 1550 1625		
	Core	50 dB	—	AQ7285	A	1310 1550		

*1 The dB value is the maximum dynamic range of OTDRs for each target area.

*2 A built-in cut filter to isolate from communication wavelengths included

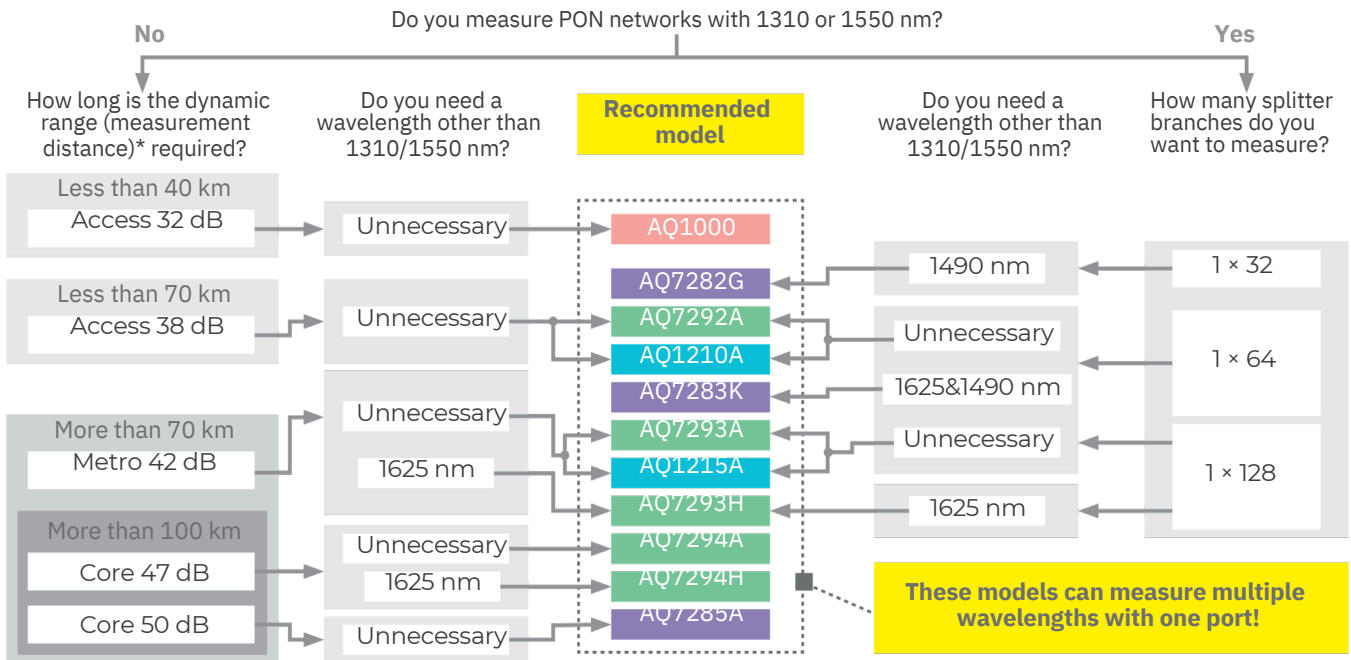
For optical fiber R&D and manufacturing

Cable type	Target application	Model	Wavelength (nm)
Single-mode Optical fiber cable	R&D/Manufacturing	AQ7286	A 1310 1550
			H 1310 1550 1625
			J 1310 1550 1625 1383

Use flow chart to select from application and measurement performance

Installation of single mode (measurement of new and dark fibers)

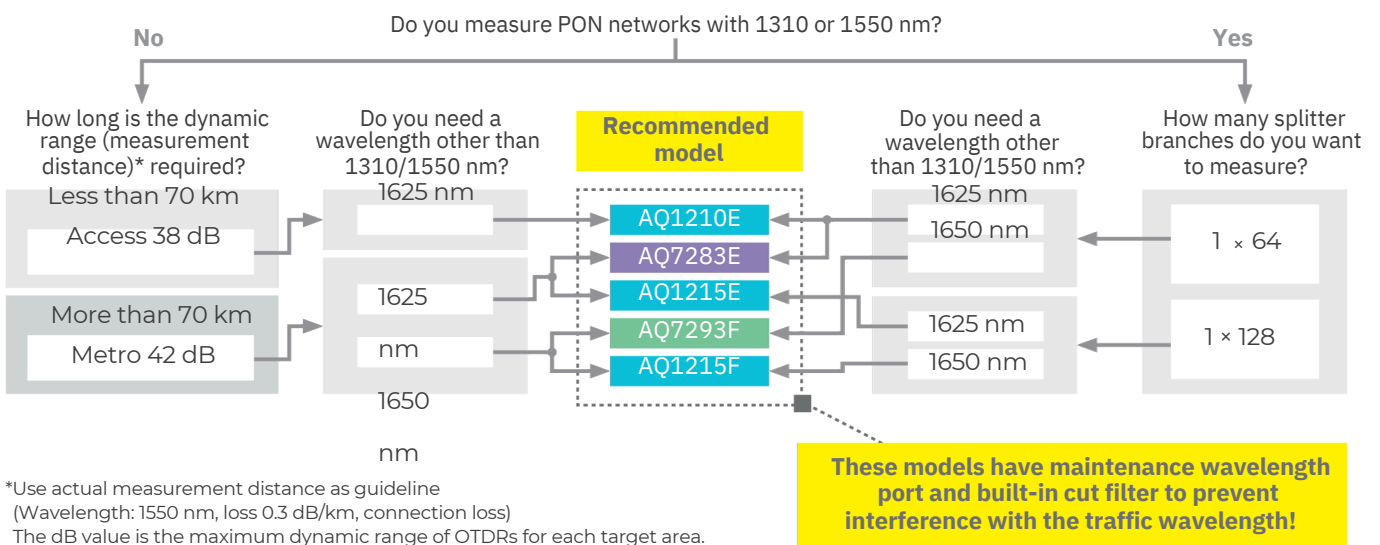
The installation models can measure multi trace, including traffic wavelengths (1310/1550 nm) using.



*Use actual measurement distance as guideline (Wavelength: 1550 nm, loss 0.3 dB/km, connection loss)
The dB value is the maximum dynamic range of OTDRs for each target area.

Installation and maintenance of single mode fiber (measurement of new and live lines)

Two separate ports effectively avoids mishaps by offering a dedicated port for the traffic wavelength and a second port for the (16xx nm) maintenance wavelength with built-in cut filter to prevent interference with the traffic wavelength.



*Use actual measurement distance as guideline
(Wavelength: 1550 nm, loss 0.3 dB/km, connection loss)
The dB value is the maximum dynamic range of OTDRs for each target area.

R&D and Manufacturing

Recommended model

AQ7286A AQ7286H AQ7286J

Ordering Information

Minimum configuration Not sold separately (Cannot be added after shipping) Sold separately

AQ7290 series

Items	Models	Suffix codes	Descriptions	Selection types
OTDR Mainframe	AQ729□□	—	OTDR [Select one model]	Required
		-□□□	[Select one language: HE, HM, HC, HK, HR]	
		-□□□	[Select one connector for OTDR: USC, UFC, ASC, NUA]	Optional
		/□□□	Optical Power Meter [Select one type: SPM, HPM] (The connector type is determined by that of connector)	
		/PC	Power checker	
		/VLS	Visible light source	
		/LAN	Ether net	
		/MN	Monitoring function	
		/	Fiber Surface Test function	
		/FST	Shoulder Belt	
/SB		Optional		

Note. The OTDR and AC adapter can be additionally purchased separately.

Accessories (Sold separately)

Items	Models	Suffix codes	Descriptions
Additional option license	735052	-FST	Additional option license (FST: Fiber Surface Test function)
		-MNT	Additional option license (MNT: Monitoring function)
Optical connector adapter (for OTDR)	SU2005A	□□□	Universal Adapter [Select one connector type: SCC, FCC, ASC]
conversion adapter	735483	-LSS	LCSC Conversion adapter
USB cable	A1681WL	—	USB Cable (Type-C at both ends)
Battery	739883	—	Battery pack (Spare)
Carrying case	739860	—	Soft carrying case

AQ1210 Series

Items	Models	Suffix codes	Descriptions	Selection types	
OTDR Main frame	AQ121□□	.□□	[Select one language: HE, HM, HC, HK, HR]	Required	
		-□□□	[Select one connector for OTDR: USC, UFC, ULC, ASC]		
		/□□□	Optical Power Meter [Select one type: SPM, HPM, PPM] (The connector type is determined by that of OTDR)	Optional	
		/PC	Power Checker (Integrated optical power meter)		
		/VLS	Visible Light Source		
		/FST	Fiber Surface Test Function		
		/SB	Shoulder belt		
					Optional

Note. AUSB power adapter is also required. Please consult with our sales representatives for recommended products.

Accessories (Sold separately)

Items	Models	Suffix codes	Descriptions
Additional option license	735051	-FST	Additional option license (FST: Fiber Surface Test function)
		-	
Optical connector adapter (for OTDR)	735482	□□□	Universal Adapter [Select one connector type: SCC, FCC, LCC, ASC]
USB cable	A1681WL	—	USB Cable (Type-C at both ends)
Battery	739884	—	Battery pack (spare)
Carrying case	SU2006A	—	Soft Carrying Case

AQ7280 Series

Items	Models	Suffix codes	Descriptions	Selection types			
OTDR Mainframe	AQ7280	—	OTDR Mainframe [Select one language: HJ, HE, HM, HC, HK, HR]	Required			
		/LAN	Ether net				
		/FST	Fiber Surface Test function	Optional			
		/MNT	Monitoring function				
		/SMP	Smart Mapper function				
		/SB	Shoulder Belt				
		AC Adapter	739874	—	AC Adapter [Select one power cord type]	Required	
		OTDR Unit	AQ728□□	—	OTDR Unit [Select one model]	Required	
				—	[Select one connector type: USC, UFC, ASC, NUA]		
				—	Power Checker (Integrated optical power meter)	Optional	
/PC	Stabilized Light Source						
/SLS	10 nm Wavelength Tolerance						
/ION	OPM (Optical Power Meter)						
OPM/VLS modules	AQ728□□			—	[Select one model] [Select one connector: SCC, FCC, SFC (2.5 mm dia.), LMC (1.25 mm dia.)] (Models with "V" include the VLS function.)		Optional
				AQ4780	VLS (Visible Light Source) (Fixed connector with 2.5 mm dia.)		

Note. The OTDR mainframe, OTDR units, AC adapter, and modules can be additionally purchased separately.

Accessories (Sold separately)

Items	Models	Suffix codes	Descriptions
Application software	735071	-HE	AQ7940 Optical Fiber Monitoring Software (Language: English/Japanese)
Additional option license	735050	□□□	Additional option license [Select one option code: MNT, SMP, FST]
Optical connector adapter (for OTDR)	SU2005A	□□□	Universal Adapter [Select one connector type: SCC, FCC] (When OTDR connector is ASC, select SCC. The ASC is not compatible with FCC)
Battery	73988	—	Battery pack (spare)
Carrying case	73986	—	Soft Carrying Case
	0		

AQ1000

Items	Models	Suffix codes	Descriptions	Selection types
OTDR Mainframe	AQ1000	—	OTDR [Select one model]	Required
		-□□□	[Select one connector for OTDR: USC, UFC, ASC]	
		/VLS	Visible Light Source	Optional
		/WLN	Wireless LAN	

Accessories (Sold separately)

Items	Models	Suffix codes	Descriptions
USB cable	A1590WL	—	USB Cable (DC power supply)
Strap	B8105EP	—	Strap

Common Accessories (Sold separately)

Items	Models	Suffix codes	Descriptions
Optical Switch	—	112-SA-SCC	× 12, SMF, SC/PC type
Application software	AQ7940	□□□	Emulation Software (Multi-language) [Select one medium: SP01 (download), SC01 (CD)]
Optical connector adapter (for OPM)	735480	-□□□	Universal Adapter [Select one connector type: SCC, FCC]
		735481	Universal Adapter [Select one connector type: SFC (2.5 mm dia.), LMC (1.25 mm dia.)]
Belt	B8070CY	—	Shoulder Belt

Related products

AQ1100Series OLTS

The AQ1100 Series OLTS is an optical loss test set that integrates a light source and a power meter. Three models are available for each light source, and three types of power meters are also selectable, making the AQ1100 series OLTS ideal for a wide range of applications. The OLTS is also equipped with an auto-loss test function for easy optical loss measurement.



AQ2170 AQ2180 AQ4280 Handy OPM/LS

The AQ2170, AQ2180, and AQ4280 are handy-type power meters and light sources. The AQ2170 and AQ2180 optical power meters are available in standard and high-power versions to suit different applications, while the AQ4280 light source is available in three different combinations of wavelengths.

