

Latest Portable OTDR Portfolio

Optical Time Domain Reflectometer Selection Guide

Precision Making

Bulletin OTDR-01EN



Select from features and size

Modular Flagship OTDR

AQ7280 Series



Flagship modular frame offering the most configuration flexibility

- Multitasking feature capable of testing up to 4 fibers simultaneously
- Large “pinch zoom” responsive capacitive touchscreen

Multi Field Tester OTDR

AQ1210 Series



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

- Smart and fully-featured, now includes multitasking

Entry level OTDR

AQ1000



Most compact and affordable model, yet still packed with the essential features

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

YOKOGAWA OTDR function comparison

● Standard ○ Option

Items	AQ7280	AQ1210	AQ1000
Dimensions (W) × (H) × (D) mm	287×210×80	210×148×69	185×116×56
Weight	2.8 kg	1 kg	660 g
Display			
Size	8.4-inch	5.7-inch	5.0-inch
Touchscreen	●	●	●
Battery operation	15 hours	10 hours	10 hours
Power supply	AC Adapter	USB power adapter	USB power adapter
Wired LAN	○	● ^{*1}	—
Wireless LAN	● ^{*1} File transfer	● ^{*1} File transfer & remote control	○
Multi-fiber measurement	●	●	—
Smart Mapper	○	●	—
Multi-tasking	●	●	—
Stabilized light source	○	●	●
Power checker ^{*2}	○	○	●
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 on recommended 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									
Single-mode optical fiber cable	Area ^{*1}		PON	Installation (measurement of new and dark lines)					Installation/Maintenance (measurement of new and live lines)				
				Model		Wavelength (nm)			Model		Wavelength ^{*2} (nm)		
	Access	32 dB	—	AQ1000	—	1310	1550						
		38 dB	1×32	AQ7282	A	1310	1550						
					G	1310	1550	1490					
	Access/ Metro	1×64	AQ1210	A	1310	1550		AQ1210	E	1310	1550	1625	
		42 dB	1×64	AQ7283	A	1310	1550		AQ7283	E	1310	1550	1625
					H	1310	1550	1625		F	1310	1550	1650
					K	1310	1550	1625		1490			
		1×128	AQ1215	A	1310	1550		AQ1215	E	1310	1550	1625	
								F	1310	1550	1650		
								AQ1216	F	1310	1550	1650	
Metro/ Core	46 dB	—	AQ7284	A	1310	1550							
				H	1310	1550	1625						
Multi-mode optical fiber cable	Core	50 dB	—	AQ7285	A	1310	1550						
	Access/ LAN	1×64	AQ1210	D	1310	1550							
			—			850	1300						
		LAN	—	AQ7282	M	850	1300						

^{*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

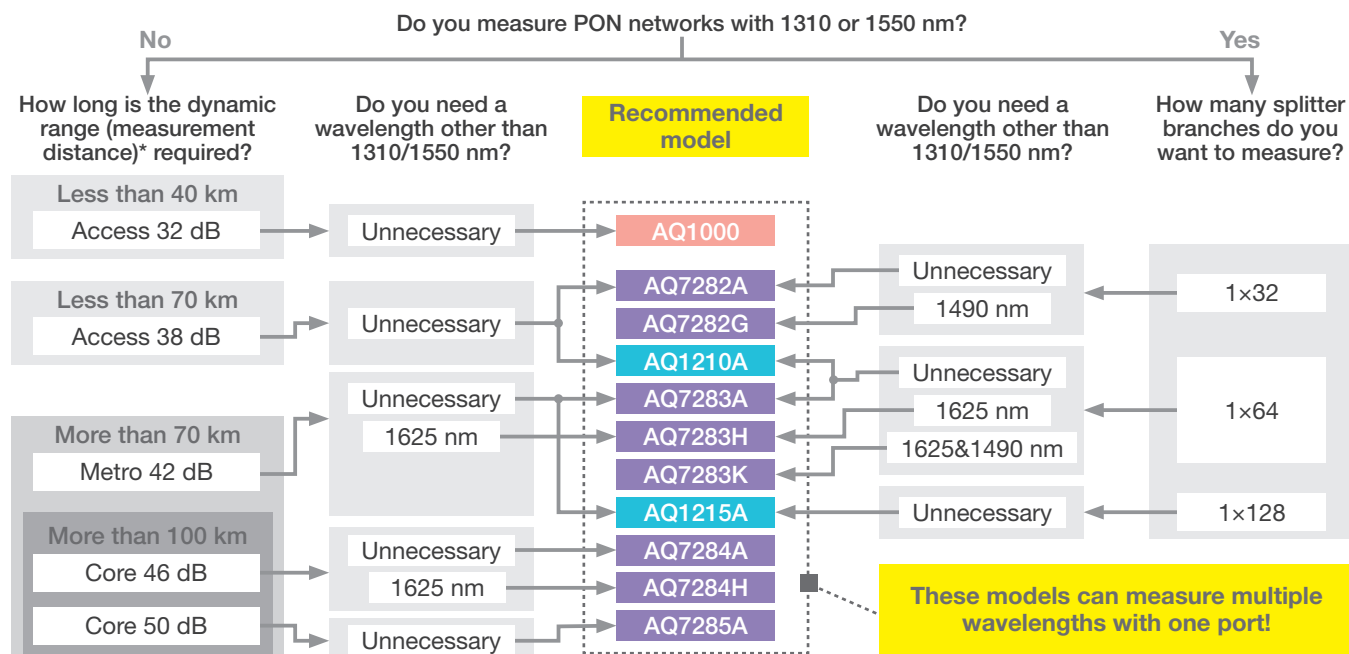
For optical fiber research and manufacturing

Cable type	Target application	Model	Wavelength (nm)
Single-mode optical fiber cable	Research/ 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 fiber (measurement of new and dark fibers)

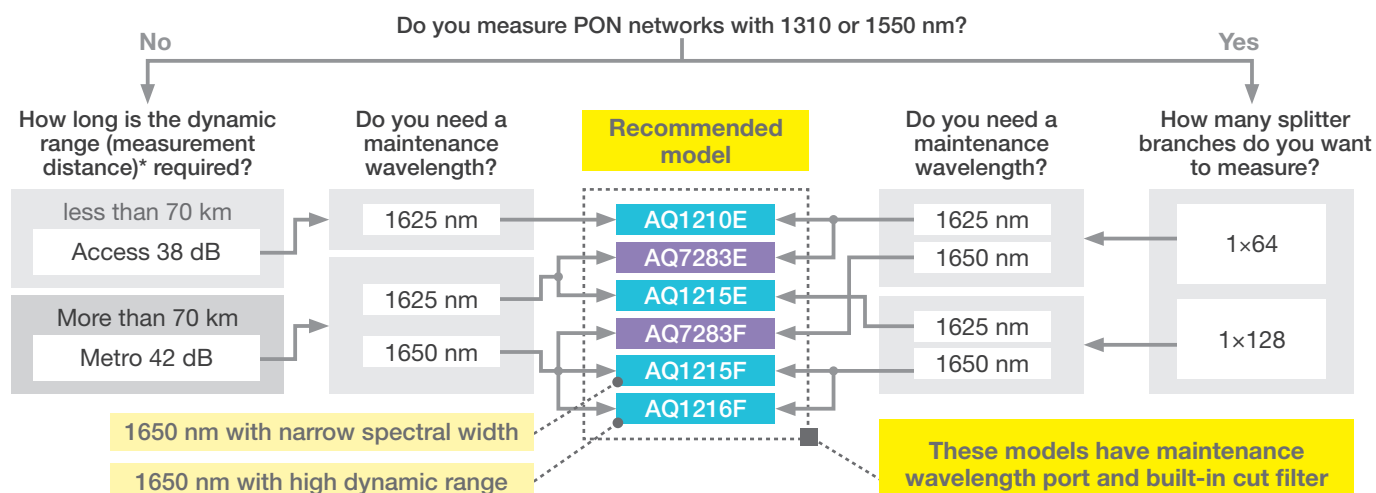
The installation models can measure multi trace, including traffic wavelengths (1310/1550 nm) using.



*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 (16xxnm) 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.

Installation of multimode fiber

Recommended model

AQ7282M

AQ1210D

R&D and Manufacturing

Recommended model

AQ7286A

AQ7286H

AQ7286J

Ordering information

Minimum configuration

Not sold separately (Cannot be added after shipping)

Sold separately

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	Ethernet	Optional
		/FST	Fiber Surface Test function	Optional
		/MNT	Monitoring function	
		/SMP	Smart Mapper function	
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, ULC, ASC, NUA]	Optional
		/PC	Power Checker (Integrated optical power meter)	
		/SLS	Stabilized Light Source	
		/10N	10 nm Wavelength Tolerance	
OPM/VLS modules	AQ278□□	-□□□	OPM (Optical Power Meter) [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	AQ7933	-□□□□	Emulation Software (Multi-language) [Select one medium: SP01 (download), SC01 (CD)]
	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, LCC] (When OTDR connector is ASC, select SCC. The ASC is not compatible with FCC and LCC.)
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.)]
Battery	739883	—	Battery pack (spare)
Belt	B8070CY	—	Shoulder Belt
Carrying case	739860	—	Soft Carrying Case
Optical Switch Box	AQ3550	-112-SA-SCC	1×12, SMF, SC/PC type

AQ1210 series

Items	Models	Suffix codes	Descriptions	Selection types
OTDR Mainframe	AQ121□□	—	OTDR [Select one language: HE, HM, HC, HK, HR]	Required
		-□□	[Select one language]	
		-□□□	[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)	Optionalss
		/PC	Power Checker (Integrated optical power meter)	
		/VLS	Visible Light Source	
		/FST	Fiber Surface Test function	Optional
		/SB	Shoulder Belt	

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

Accessories (Sold separately)

Items	Models	Suffix codes	Descriptions
Application software	AQ7933	-□□□□	Emulation Software (Multi-language) [Select one medium: SP01 (download), SC01 (CD)]
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]
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.)]
USB cable	A1681WL	—	USB Cable (Type-C at both ends)
Battery	739884	—	Battery pack (spare)
Belt	B8070CY	—	Shoulder Belt
Carrying case	SU2006A	—	Soft Carrying Case
Optical Switch Box	AQ3550	-112-SA-SCC	1×12, SMF, SC/PC type

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
Application software	AQ7933	-□□□	Emulation Software (Multi-language) [Select one medium: SP01 (download), SC01 (CD)]
Optical connector adapter (for OTDR)	735482	-□□□	Universal Adapter [Select one connector type: SCC, FCC]
USB cable	A1590WL	—	USB Cable (DC power supply)
Strap	B8105EP	—	Strap

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