

# Specifications

## ■ AQ7260 OTDR main frame

Display 1)		8.4 inch color TFT (640 × 480 dots)
Horizontal axis	Full-scale	25m, 50m, 100m, 250m, 500m, 1km, 2km, 2.5km, 5km, 10km, 20km, 40km, 80km, 160km, 240km, 320km, 640km (depend on the optical unit)
	Shift	0 to distance range
	Readout resolution	min. 1cm
	Sample data count	max. 60,000 points
	Group refractive index setting	1.00000 to 1.99999 in 0.00001 steps
Vertical axis	Distance measurement	Displays the relative one-way distance between any two given points, in eight digits
	Scale	0.2dB/div, 0.5dB/div, 1dB/div, 2dB/div, 5dB/div, 7.5dB/div
	Shift	0 to 68dB
	Read Resolution	Min 0.001dB
	Loss measurement	Displays one-way losses in steps of 0.001dB to a maximum of 5 digits Displays the relative one-way loss, loss per unit length, and splice loss between any two given points on the waveform.
Return-loss measurement function		Return loss at mechanical connectors can be measured Total return loss of a fiber cable or between any two points can be measured
Memory	Internal Memory	20MB
	PCMCIA	For stored measurement waveforms and measurement conditions. (A PCMCIA memory card must be purchased separately.)
Interface	USB (Host Interface)	2 ports, conforms to USB Rev. 1.0, USB memory (Supports memory without security functions.), keyboard, printer
	Printer / FDD	Can mount cable less on the back of the optical module cover. (Must purchase an optional unit separately.)
Power requirement	AC Adapter	AC100 to 240V, max. 60W (When using optional printer unit during charging battery)
	Battery	Li-Ion, Operating time : approx. 6 hours (measurement for 30 seconds in every 3 minutes, using AQ7261 without any optional units, in Power Save Mode) charging time : < 5 hours (Room temperature is 23 °C when the power is OFF.)
Environmental conditions	Operating Temperature	-10 to +50°C (During charging : +5 to +35°C)
	Storage Temperature	-20 to +60°C
	Relative humidity	95% or less (no condensation)
Dimensions and mass		Approx. 299 (W) × 225 (H) × 62 (D) mm (Has no projections) Approx. 3kg (Included optical modules. The weight is 3.3kg when AQ7269 is mounted.)
Accessories		Battery Pack, Shoulder Strap and User's Manual

1) Liquid crystal display may include few defective pixels (within 0.002% with respect to the total number of pixels including RGB). There may be few pixels on the liquid crystal display that do not emit all the time or remains ON all the time. Not

## ■ Optical modules

Model name	AQ7261 SMF Module	AQ7264 SMF Module	AQ7265 SMF Module	AQ7269 MMF/SMF Module	
Measured wavelength (nm)	1310/1550 +/-25	1310/1550 +/- 20		850/1300 +/- 30	1310/1550 +/-25
Measured fiber	SM (ITU-T G.652)			GI (62.5/125u, 50/125u)	SM (ITU-T G.652)
Distance range (km)	2, 5, 10, 20, 40, 80, 160, 240, 320, 640 <sup>8)</sup>			1, 2, 5, 10, 20, 40, 80 <sup>7)</sup>	2, 5, 10, 20, 40, 80, 160, 240
Pulse width (sec) <sup>5)</sup>	10n, 20n, 50n, 100n, 200n, 500n, 1u, 4u, 10u, 20u, 50u <sup>3)</sup>			10n, 20n, 50n, 100n, 200n, 500n, 1u <sup>8)</sup>	10n, 20n, 50n, 100n, 200n, 500n, 1u, 4u, 10u, 20u
Distance sampling resolution	min. 5cm				
Distance sampling points	max. 60,000 points				
Distance measurement accuracy (m)	+/- 1m				
	Measured distance × 2 × 10 <sup>-5</sup>				
	+/- 1 sampling resolution				
Dead zone (m)	Event <sup>1)</sup>	2 typ.	2 typ.	2 typ.	2 typ. <sup>10)</sup>
	Attenuation <sup>2)</sup>	15/20 typ.	7/8 typ.	7/8 typ.	7/8 typ. <sup>10) 11)</sup>
Dynamic range (dB) SNR=1, for 3 minutes	34/32 <sup>9)</sup>	40/38 <sup>9)</sup>	43/41 <sup>9)</sup>	22.5/24 <sup>10) 12)</sup>	34/32 <sup>9)</sup>
	35/33 typ.	42/40 typ.	45/43 typ.		
Loss measurement accuracy	+/-0.05 dB/dB <sup>13)</sup>				
Stabilized Light Source	Wavelength (nm)	—	1310/1550	1310/1550	—
	Max. output (dBm)	—	-3 +/- 2	-3 +/- 2	—
	Stability (dB) <sup>4)</sup>	—	+/- 0.1	+/- 0.1	—
Optical connector	Optional AQ9441(*) Universal Adapter <sup>14)</sup>				
Environmental condition	Operating Temperature	-10 to +50°C			0 to +40°C
	Storage Temperature	-20 to +60°C			
	Humidity	95% or less (no condensation)			

- Distance width between the event peak point, where the return loss is 40 dB or higher (event is not saturated), and the point where the level is 1.5 dB smaller than the event peak.  
At pulse width 10ns.
- Distance width at points where the optical connector's return loss is 45 dB or higher and the back scatter level is within +/- 0.5 dB of the normal level. At pulse width 10ns.
- 50us is only 1550nm of AQ7264/AQ7265.
- 5minutes measurement at constant temperature.
- 1 us can be set at a distance range of over 10km, and 4us can be set at a distance range of over 40km.
- When measuring 1310nm, the maximum is 320km. When measuring 1550nm, the maximum is 640km. (AQ7264/AQ7265 only)

- 40km, 80km is only 1300nm.
- 500ns, 1us is only 1300nm.
- At pulse width 20us and filter ON.
- At GI 62.5/125us
- Distance width at points where the optical connector's return loss is 40 dB or higher and the back scatter level is within +/- 0.5 dB of the normal level. At pulse width 10ns.
- At pulse width 200ns (850nm), 1us (1300nm) and filter ON.
- For AQ7269 MMF at 62.5/125us
- \* mark is connector type. Selectable connector type. (FC, SC, ST, DIN)

### Laser Safety Information

\* These laser sources are classified IEC60825-1 : Class 1M

\* The laser products comply with 21CFR1040.10 except for deviations pursuant to Laser Notice No.50, dated May 27 2001

\* Viewing the laser output with certain optical instruments such as loupe, magnifying glass or telescope within 100mm may cause damage to the eyes.