

AQ1100 MFT-OLTS

Multi Field Tester OLTS

Optical Loss Test Set

Supports MM850/1300nm and SM1310/1550/1625nm,
and up to +27dBm with optical power meter



Light Source + Optical Power Meter in One

- Light Sources (3 models)
 - SM1310/1550nm
 - SM1310/1550/1625nm
 - MM850/1300nm and SM1310/1550nm
- Optical Power Meter Selections
 - Standard: +10 to -70dBm
 - High power: +27 to -50dBm
 - PON : 1490/1550nm Parallel measurement

Excellent Functionality and Operability

- 5.7 inch color LCD for easy viewing
- Multi-Language support
- Multi-core fiber measurement with a pair set
- USB port for data storage
- PING Test function (optional)
- Visible light Source (optional)

QUALITY ■ INNOVATION ■ FORESIGHT

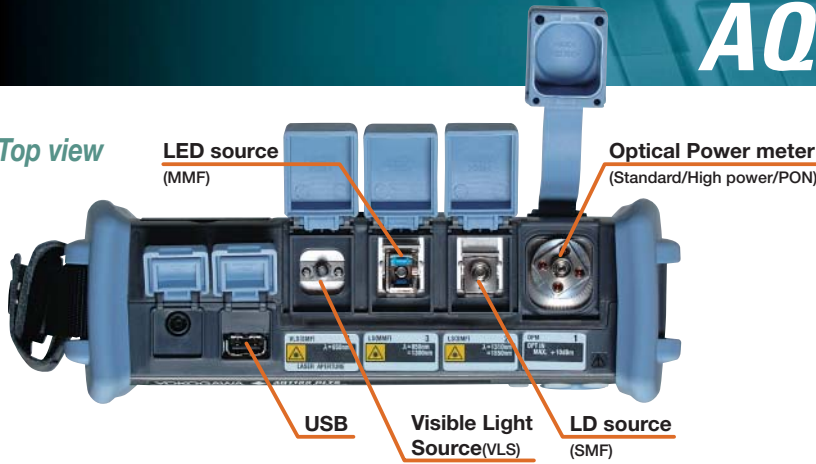
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Test & Measurement Instruments

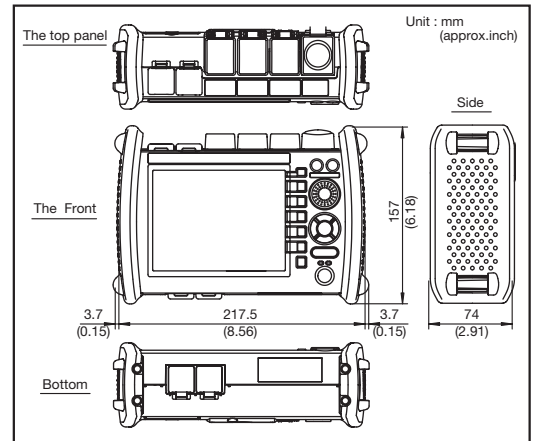
Multi Field Tester OLTS

AQ1100 MFT-OLTS

Top view



Dimensions



Specifications

Models		AQ1100A	AQ1100B	AQ1100D
Light source	Wavelength (nm) *1	1310/1550 ± 25	1310/1550/1625 ± 25	1310/1550 ± 25 (SM) 850/1300 ± 30 (GL)
	Light emitting device	LD	LD	LD (SM), LED (GL)
	SM(LED) Spectral width (nm) *1 *2	<5 / <10	<5 / <10 / <10	<5 / <10
	GI(LED) Spectral width(nm) *1 *3 (FWHM)	—	—	40(typ) / 140(typ)
	Optical output level (dBm)	-3 ± 1	-3 ± 1	SM: -3 ± 1 GL: -20 ± 1
	Level stability (dB) *4	±0.05	±0.05	SM: ±0.05 GL: ±0.1
	Modulation mode	CW, CHOP(270Hz, 1kHz, 2kHz) *5		
	Applicable fiber	SM (ITU-T G.652)		SM (ITU-T G.652) GI (50/125um)
	Optical Connector	SC, FC, φ1.25 ferrule, SC/Angled-PC		SC, FC, φ1.25 ferrule
	Laser class	Class 1		

Built-in Optical Powermeter			
	Standard/(SPM)	High Power/(HPM)	PON/(PPM)
Wavelength setting	Simple mode: 850/1300/1310/1490/1550/1625/1650nm Detail mode: 850 nm to 1650 nm, 1nm step CWDM mode: 1270nm to 1610nm 20nm step	1310/1490/1550nm (1490nm and 1550nm can measured separately)	1310/1490/1550nm (1490nm and 1550nm can measured separately)
Power range	+10 to -70dBm (CW) +7 to -70dBm (CHOP)	+27 to -50dBm (CW) +24 to -50dBm (CHOP) *6	+27 to -50dBm: 1550nm +10 to -70dBm: 1310/1490nm
Noise level	0.5nW (-63dBm, 1310nm)	50nW (-43dBm, 1310nm)	0.5nW/-63dBm, 1310nm 50nW/-43dBm, 1550nm)
Uncertainty under standard conditions *7	±5%	±5%	±0.5dB (10%)
Readout resolution	0.01		
Level unit	Absolute: dBm, mW, μW, nW Relative: dB		
Modulation mode	CW CHOP(270/1k/2kHz)	CW CHOP(270/1k/2kHz)	CW
Average function	1, 10, 50 and 100 times		
Logging function	Measurement intervals: 500ms, 1s, 2s, 5s, 10s Measurement count: 10 to 1000		

General Specifications	
Display	5.7 inch color LCD (640x480)
Loss test mode (only with /SPM or /HPM)	Auto loss test, Loopback test, Multi-core loss test
Internal memory	128MByte
External interface	USB1.1 TypeA and TypeB (mini) 1 ea.
Power supply	AC/DC adaptor: 100 to 240VAC, 200 to 240VAC, 50/60 Hz Battery: Li-ion, duration 6 hour *8, charging time 5 hours
Dimensions and mass	217.5 mm (W) x 157mm(H) x 74mm(D) (excl. projections) Approx. 1 kg (incl. internal battery)
Environmental condition	Operating environment: Temperature 0 to 45°C (0 to 35°C when charging the battery) Humidity 85% RH or less (no condensation) Storage environment: Temperature -20 to 60°C, Humidity 85% RH or less (no condensation)
Safety standard	EN61010-1, EN60825-1 (laser safety)
EMC	EN61326-1 ClassA, EN55011 Class A Group 1, C-Tick EN55011 Class A Group 1

Factory Installed Options		
Visible light source (VLS)	Optical connector	φ2.5 ferrule type
	Wavelength and optical output level	650 nm ±20 nm, peak value -3 dBm or more
	Modulation mode	CHOP 2Hz
LAN interface (LAN)	Laser class	Class 3R
	10BASE-T/100BASE-TX RJ-45 connector	Ping test, PC remote control

The specifications are at 23°C ± 2°C unless otherwise noted. *1 23°C ± 2°C, CW *2 RMS (2σ, 20dB) *3 Envelope (-3dB) *4 for 15 minutes at a constant temperature within 23°C ± 2°C *5 CW and 270Hz only at 850nm and 1300nm *6 Except for 850nm and 1650nm. *7 23°C ± 2°C, standard conditions (CW, 1310nm, 100μW, SMF), at 1550nm for /PPM. *8 LD On. (in screen save mode)

Model and suffix codes

Model	Suffix code	Descriptions
AQ1100A		LS:1310/1550nm
AQ1100B		LS:1310/1550/1625nm
AQ1100D		LS:MM850/1300, SM1310/1550nm
Language	-HJ	Japanese/English
	-HE	English
	-HC	Chinese/English
	-HK	Korean/English
	-HR	Russian/English
Power cord	-M	Complied with PSE
	-D	UL/CSA standard
	-F	VDE standard
	-R	AS standard
	-Q	BS, Singapore standard
	-H	GB standard, Complied with CCC
Optical power meter	-SPM	Optical power meter
	-HPM	High power optical power meter
	-PPM (AQ1100A only)	PON Optical power meter
Optical connector	-USC	SC type (LS port, and OPM port)
	-UFC	FC type (LS port, and OPM port)
	-ULC	LC type (LS port, and OPM port for -PPM), φ1.25 adapter(OPM port for -SPM and -HPM)
	-ASC (except AQ1100D)	SC/Angled-PC type (LS port, and OPM port for -PPM), SC type (OPM port for -SPM and -HPM)
	Factory installed options	/VLS Visible light source, optical connector: 2.5φ ferrule /LAN Ethernet (10/100BASE-TX) /SB Shoulder belt

Standard Accessories
Power cord, AC adaptor, battery pack, hand belt, user's manual (CD-ROM), operation guide

Accessories

Model	Suffix code	Descriptions
SU2006A		Soft carrying case
735480 (For optical power meters)	-SCC	Connector adapter (SC)
	-FCC	Connector adapter (FC)
735481	-LMC	Ferrule adapter (φ1.25)
SU2005A (For LS and PON optical power meter)	-SCC	Universal adapter (SC)
	-FCC	Universal adapter (FC)
	-LCC	Universal adapter (LC)
739871	-M	Complied with PSE
	-D	UL/CSA standard
	-F	VDE standard
	-R	AS standard
	-Q	BS, Singapore standard
	-H	GB standard, Complied with CCC
739882	-P	EK standard (S. Korea)
		Battery pack (Spare)
B8070CY		Shoulder belt

Optical Test Tools for Installation & Maintenance

Optical Power Meter

AQ2160-01

Simplified functions bring superior cost performance

- Easy 3-key operation
- LCD with Backlight



AQ2160-02

Powerful tools with high performance and durability

- Wavelength: 750 to 1700nm
- Data storage for test results (up to 1100 data)



LD Source

AQ4270-01

Small and light weight 2-wavelength light source (1310/1550nm)

- High output level stability
- Detachable universal adapter for easy cleaning.



OTDR

AQ7275

Superior cost performance, Easy to operate makes your work more efficient

- Wide Range of Modules Available (9 models)
- World-class Short Dead Zone (0.8 m)
- High Dynamic Range (45dB)
- Multi-core fiber measurement function to increase work efficiency



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