Seven models offer different wavelength and dynamic range combinations
## Multifunctional Handheld OTDR

**Offering Powerful Test Features & Excellent Operability**

**Compact chassis yet fully equipped with field testing functions**

The AQ1200 Multi Field Tester OTDR is a compact and lightweight handheld OTDR optimized for the installation and maintenance of optical fiber cables. Designed with ease of use in mind to simplify field testing, improve work efficiency and ensure quality results. Seven models are offered, each with unique wavelength(s) based on their specific application.

### Visible Light Source

For visually identifying fiber under test and locating a break point within the near-end dead zone.

### DC power connector

For power supply.

### USB TYPE A

For connection to a PC.

### USB TYPE B (mini USB)

For connection to a PC.

### OTDR, Light source

For optical source.

### Optical power meter port

For optical power meter.

### LAN

For network communication.

### Software keys

To select the menu on the right side of the display.

### MENU key

Moves to main menu.

### Arrow keys/Enter keys

To move cursor and change parameters within a dialogue box.

### REAL TIME and AVG key

To start or stop the OTDR measurement.

### SETUP key

To show the setup menu.

### ESC key

To abort operations or escape from menus.

### Power key

To power ON/OFF.

### Bumper

For shock protection.

### Hand belt

To hold with one hand during operation and also serves as a convenient carrying handle.

### LCD display

5.7 inch TFT LCD display.

### Wave length:

- Port2 : 1310/1550(AQ1200A/E, AQ1205A/E/F)
- Port3 : 1625nm**(AQ1200E), 1650nm**(AQ1205F)

**Notes:**
- *: Option
- **: Built-in Filter

### PON Measurement Capability

**Central Office**

- V-OLT
- GE-OLT
- WDM

**Broadcaster**

- V-OIU
- GE-OIU
- WDM

**1x4 1x16**

Optical Fiber

1550 nm

1490 nm

1310 nm

1625/1650 nm

A built-in cut filter isolates the maintenance wavelength from the communication wavelength in order to perform accurate measurements in live networks.

Models with a wavelength dedicated for maintenance of live fibers.

Models with a wavelength dedicated for communication services.

Standard model with the same wavelengths used for communication services.

Applicable for installation and maintenance wavelengths cut filter (built in).

**Example of measurement over a 64 port splitter**

- Event dead zone 0.75 m
- Port 1 : 1310/1550 nm
- Port 2 : 1625/1650 nm

With a short dead zone, the AQ1200 can distinguish connectors placed as closely as 0.75 m in FTTx, home or office networks.

Can ensure a quality waveform even if there is a big loss of optical splitter in the line.

The AQ1200 MFT OTDR’s PON measurement mode (*) is a mode optimized for the measurement of PON with a high-port-count optical splitter and that is installed after the splitter.

In Passive Optical Network (PON) System used in FTTH (Fiber To The Home) it is important to quickly and correctly find a fault in the drop cable maintenance applications.

The high dynamic range feature can accurately measure the trace even after the splitter in PON system. Thus this is highly suited for high port count PON networks with up to 64 ports splitters.

The AQ1200 Multi Field OTDR with a high port count PON measurement mode(*) is ideal for PON networks with up to 64 ports splitters.

This High dynamic range model can accurately measure the trace even after the splitter in a PON system. Thus this standard wavelength model is highly suited for high port count PON networks with up to 64 ports splitters.

This High dynamic range model can accurately measure the trace even after the splitter in a PON system. Thus this standard wavelength model is highly suited for high port count PON networks with up to 64 ports splitters.

These tri-wavelength models offers high dynamic range and has two ports. One port offers the communication wavelengths while the other port is dedicated for the maintenance wavelength. Thus this model is ideal for use in both installation and maintenance applications.

AQ1200A
1310/1550 nm

AQ1200B
1310/1550 nm

AQ1200C
1625 nm

AQ1200E
1625/1650 nm

AQ1205A
1310/1550 nm

AQ1205B
1310/1550 nm

AQ1205C
1650 nm

AQ1205D
1625 nm

AQ1205E
1625/1650 nm

AQ1205F
1625/1650 nm

AQ1205G
1625/1650 nm
## Operability

**Multi Field Tester**

**MFT-OTDR**

### AQ1200

## Product Lineup

<table>
<thead>
<tr>
<th>Model</th>
<th>Wavelengths</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AQ1200A</td>
<td>1310/1550 nm</td>
<td>Standard model with the same wavelengths used for communication services. Applicable for installation and maintenance.</td>
</tr>
<tr>
<td>AQ1200B</td>
<td>1625 nm</td>
<td>Models with a wavelength dedicated for maintenance of live fibers. A built-in cut filter isolates the maintenance wavelength from the communication wavelength in order to perform accurate measurements in live networks.</td>
</tr>
<tr>
<td>AQ1200C</td>
<td>1650 nm</td>
<td>These tri-wavelength models have two ports. One port offers the communication wavelengths while the other port is dedicated for the maintenance wavelength. Thus this model is ideal for use in both installation and maintenance applications.</td>
</tr>
<tr>
<td>AQ1200E</td>
<td>1310/1550 nm, 1625 nm</td>
<td>This high dynamic range model can accurately measure the trace even after the splitter in a PON system. Thus this standard wavelength model is highly suited for high port count PON networks with up to 64 ports splitters.</td>
</tr>
<tr>
<td>AQ1205A</td>
<td>1310/1550 nm</td>
<td>These tri-wavelength models offer high dynamic range and have two ports. One port offers the communication wavelengths while the other port is dedicated for the maintenance wavelength. Thus this model is ideal for use in both installation and maintenance applications.</td>
</tr>
<tr>
<td>AQ1205E</td>
<td>1310/1550 nm, 1625 nm</td>
<td>The high dynamic range feature can accurately measure the trace even after the splitter in a PON system. Thus this model is highly suited for high port count PON networks with up to 64 ports splitters.</td>
</tr>
</tbody>
</table>

### PON Measurement Capability

In Passive Optical Network (PON) System used in FTTH (Fiber To The Home) it is important to quickly and correctly find a fault in the drop cable that is installed after the splitter.

The AQ1200 MFT OTDR’s PON measurement mode (*) is a mode optimized for the measurement of PON with a high-port-count optical splitter and can ensure a quality waveform even if there is a big loss of optical splitter in the line.

With a short dead zone, the AQ1200 can distinguish connectors placed as closely as 0.75 m in FTTHx, home or office networks.

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*Please make sure that the measurement signal does not affect the communication services before use, by implementing a measurement wavelength cut filter in the line under test or otherwise.*

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**Example of measurement over a 64 port splitter**

![Example of measurement over a 64 port splitter](image)

**Event dead zone 0.75 m**

![Event dead zone 0.75 m](image)
Find a fiber break point easily and rapidly
Pressing one button initiates a measurement and event search and then clearly indicates the location of a fiber break.
Waveform analysis can be done by simply switching over to OTDR function.

Light Source & Optical Powermeter
Loss measurement with LS & OPM interlock
AQ1200’s light source can transmit wavelength information, so that AQ1200’s optical powermeter can make measurements at a right wavelength at the other end. Moreover, the AQ1200A’s light source and optical powermeter can switch between two wavelengths (1310 and 1550 nm) automatically; therefore, the optical powermeter can make measurements at right wavelengths, changing the wavelength along with the light source.

Measurement result storage and report output
Measurement results can be saved in the internal storage or external USB storage media, and the measurement report can be generated in CSV format.
* : /SLT or /HLT option is required to use this function.

Manual Loss test using light source & optical powermeter* 1, 2
After adjusting the optical output power (P1) at the end of launch fiber, measure the output power of fiber under test (P2).

Total fiber loss = P1 - P2 (dB)
High power measurement* 2
Allow to measure the high power output of optical amplifier, which is used for video services, such as CATV, and long distance transmission.
* : /SLT option is required to use this function.  *2 : /HLT option is required to use this function.

Auto Loss Test*

Multicore Loss Test*
Work as Master & Slave using the communication fiber
The master unit can share the project information such as the core number table and measurement conditions with the slave unit by sending them through the communication fiber in the cable under test.
* : /SLT or /HLT option is required to use this function.

PON Optical Powermeter*
Simultaneous 1490 & 1550 nm measurement
The PON power meter can measure the optical power both at 1490 nm and at 1550 nm simultaneously by separating those wavelengths.
Suitable tool for measuring the optical power of OLT and V-OLT.
* : /PPM option is required to use this function.
For Evaluation of Multicore Fiber — Multi Trace Analysis

Up to four traces can be overlaid on the display for analysis and comparison. This is useful for evaluating connection point locations and loss after installing multicore fiber.

For Evaluation of Aged Deterioration — Differential Trace Analysis

Displays the difference between two specified traces. Makes it simple to check aged deterioration of fibers or connection points, or fluctuation in loss between fibers, and other phenomena.

For Accurate Splice Loss Measurement by Bi-directional Testing — 2 Way Trace Analysis

Merges the two traces measured from both directions and finds the correct splice loss. Connection loss in lines where optical fibers of differing backscatter coefficients are connected can differ depending on the direction. In such cases, you can accurately determine the loss by measuring in both directions and taking an average.

Multi Fiber Measurement Function

The Multi fiber measurement function automatically performs measurements and data-filing according to a pre-established file name table. At worksite, you can execute it by selecting a fiber number in the table. The saved waveform can be easily shown in the preview window by selecting the core number in the table. The OTDR Project File Editor included in AQ12932 Emulation Software greatly saves time to create file name table.

Visible Light Source*

Visible fault location and Fiber identification

The visible light source enables to identify a single core out of multicore fiber and find a break point in a launch area visually. This feature works even when OTDR is in use, so that you can search for a next fiber to test, while OTDR is measuring one fiber.

Macro Bending Function (not available for the AQ1200B/AQ1200C)

If there is a bend in the optical fiber, the long wavelength loss is higher at the location of the bend. This function uses this characteristic to locate macro bends by measuring the same line at multiple wavelengths.

Remote Control Software

Remote Control using the same GUI

The AQ1200 can be remotely controlled from a personal computer (PC) through Ethernet* or USB interface. The remote control software displays a front panel image of AQ1200 on PC, so you can control the AQ1200 with mouse in the same manner as operating the actual instrument.

Fiber end inspection

With a video fiber inspection probe connected to USB interface, the AQ1200 can show an image of the fiber end on the screen to visually inspect scratches and dirtiness. The video image can be saved in the internal memory or external USB storage media.

Fiber Inspection Probe screen

- Recommended probe: Di-1000-B2 (Lightle)

Ping Test Screen

IPv4 Ping

For testing network connections by sending Ping through the optional LAN interface, no need to bring a PC. Variable frame length and transmission intervals

* : /LAN option is required to use this function.

* : /VLS option is required to use this function.

* : /HLT option is required to use this function.
AQ7932 OTDR Emulation Software (Sold Separately)

The AQ7932 is an application software that performs analysis of trace data measured by the AQ1200 MFT-OTDR and creates reports on a PC. The report creation wizard function makes this task simple. AQ1200 MFT-OTDR data can be easily loaded onto a PC using USB memory or storage function.

(The AQ1200 MFT-OTDR is supported from software version 4.1. Please make sure of the version information before use.)

### Trace Analysis
You can edit event search conditions, approximate curve line section, and other analysis conditions, and repeat the analysis. Operation is also easy. Simply click the function icon.

### Variety of Analysis Functions
Display up to eight traces on screen, and perform various analyses including multi trace analysis and differential trace analysis for comparing recent waveforms with old ones, and use the 2 way trace analysis function for analyzing average values of data measured from both ends of optical fiber.

### Creating Reports
You can compile traces and measured values of trace files and creates a report. Reports can be created easily by just following the step-by-step instructions in the report wizard and saved in Excel or CSV format.

### Functionality
- **Data format**: .SOR (Tellcore), .SOR (Tellcordia [AQ1200/AQ7270/AQ7275/AQ7260]), .TRD (AQ7260), .TRB (AQ7250), .BMP (BMP), .CSV (Data CSV), .CSV (Event List CSV)
- **Report output**: CSV file, XLS file, and print out

### PC requirements (Software and Hardware)
- **Software**
  - **OS**: Microsoft Windows 2000, Microsoft Windows XP, Microsoft Windows Vista*, Windows 7
  - **Excel**: Microsoft Excel 2000 or later (when the XLS file output function is used)
- **Hardware**
  - **Clock speed**: Environment in which the OS operates smoothly.
  - **HD capacity**: 20 MB or more space required at the time of installation
  - **Memory capacity**: 128 MB or more (256 MB or more recommended)
  - **Display**: Resolution of 1024 × 768 pixels or better
  - **Disc drive**: CD-ROM drive

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### Common Specifications

#### Horizontal Axis Parameters
- **Sampling resolution**: 6 cm, 10 cm, 20 cm, 50 cm, 1 m, 2 m, 4 m, 8 m, 16 m, 32 m
- **Readout resolution**: 1 cm (Min.)
- **Number of sampled data**: Up to 128,000 points (Firmware Rev2.01 or later)
- **Group refractive index**: 1.30000 to 1.79999 (in 0.00001 steps)
- **Unit of distance**: km, kf or miles
- **Distance measurement accuracy**
  - ±1 m + Measurement distance × 2 × 10⁻⁶ ± sampling resolution
  - Excluding IOR uncertainty

#### Vertical Axis Parameters
- **Vertical scale**: 0.2 dB/div, 0.5 dB/div, 1 dB/div, 2 dB/div, 5 dB/div, 7.5 dB/div
- **Readout resolution**: 0.001 dB (Min.)
- **Loss measurement accuracy**
  - ±0.05 dB/div (When the measuring loss is 1 dB or less, the accuracy is within ±0.05 dB.)

#### OTDR Measurement Function
- **Distance measurement**: Displays up to eight digits of the relative one way direction between two arbitrary points on the trace.
- **Loss measurement**: Displays one way loss in steps of 0.001 dB to a maximum of 5 digits. Displays the one way loss, loss per unit length, and splice loss between any arbitrary points on the trace.
- **Return loss measurement**: Measures return loss and total return loss of a fiber cable or between two arbitrary points on the trace.

### OTDR Analysis Functions
- **Analysis functions**: Section analysis
- **Internal Memory**
  - **Memory capacity**: 1000 waveforms or more
  - **Can store measured waveforms and measurement conditions**

### Display
- **Display**: 5.7 inch color TFT LCD
- **Total number of displayed pixels**: 640 (horizontal) × 480 (vertical) pixels
- *: The LCD may contain some pixels that are always ON or OFF (0.002% or fewer of all displayed pixels including RGB), but this is not indicative of a general malfunction.

### External Interface
- **USB**: USB1.1 Type A and Type B, one each
  - **Type A**: For external memory, external printer, and fiber inspection probe
  - **Type B (mini)**: For connecting to an external PC for remote control or access to the OTDR’s internal memory.

### File Formats
- **Read**: SOR, SET (AQ7270/AQ7275/AQ1200)
- **Write**: SOR (Telcordia), SET, CSV, BMP, JPEG, PNG

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Microsoft Windows 2000, Windows XP, Windows Vista and Windows 7 are registered trademarks or trademarks of Microsoft Corporation in the United States and other countries. The TM and ® symbols are not used to indicate registered trademarks and trademarks in this document. (*) Microsoft Windows Vista is to be supported in Ver. 3.03 and later.
Specifications per Model

<table>
<thead>
<tr>
<th>Model name</th>
<th>AQ1200A</th>
<th>AQ1200B</th>
<th>AQ1200C</th>
<th>AQ1202A</th>
<th>AQ1202E</th>
<th>AQ1205A</th>
<th>AQ1205E</th>
<th>AQ1205F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measured wavelength (nm)</td>
<td>1310±20(typ)/1550±20(typ)</td>
<td>1625±10</td>
<td>1650±5, 1650±10</td>
<td>1310±20(typ)/1550±20(typ)</td>
<td>1625±10</td>
<td>1310±20(typ)/1550±20(typ)</td>
<td>1625±10</td>
<td>1310±20(typ)/1550±20(typ)</td>
</tr>
<tr>
<td>Distance range (km)</td>
<td>0.5, 1, 2, 5, 10, 20, 50, 100, 200, 300, 400, 512</td>
<td>0.5, 1, 2, 5, 10, 20, 50, 100, 200, 300, 400, 512</td>
<td>0.5, 1, 2, 5, 10, 20, 50, 100, 200, 300, 400, 512</td>
<td>0.5, 1, 2, 5, 10, 20, 50, 100, 200, 300, 400, 512</td>
<td>0.5, 1, 2, 5, 10, 20, 50, 100, 200, 300, 400, 512</td>
<td>0.5, 1, 2, 5, 10, 20, 50, 100, 200, 300, 400, 512</td>
<td>0.5, 1, 2, 5, 10, 20, 50, 100, 200, 300, 400, 512</td>
<td></td>
</tr>
<tr>
<td>Pulse width (ns)</td>
<td>3, 10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10000, 20000</td>
<td>3, 10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10000, 20000</td>
<td>3, 10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10000, 20000</td>
<td>3, 10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10000, 20000</td>
<td>3, 10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10000, 20000</td>
<td>3, 10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10000, 20000</td>
<td>3, 10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10000, 20000</td>
<td></td>
</tr>
<tr>
<td>Attenuation Dead zone (typ.)</td>
<td>4m/5m</td>
<td>7m</td>
<td>4m/5m, 7m</td>
<td>4m/5m</td>
<td>7m</td>
<td>4m/5m, 7m</td>
<td>4m/5m, 7m</td>
<td></td>
</tr>
<tr>
<td>Loss measurement accuracy</td>
<td>±0.05dB</td>
<td>±0.05dB</td>
<td>±0.05dB</td>
<td>±0.05dB</td>
<td>±0.05dB</td>
<td>±0.05dB</td>
<td>±0.05dB</td>
<td></td>
</tr>
<tr>
<td>Dynamic range (dB)</td>
<td>34/35</td>
<td>35</td>
<td>35</td>
<td>34/35</td>
<td>35</td>
<td>35</td>
<td>34/35</td>
<td></td>
</tr>
<tr>
<td>Optical connector</td>
<td>Universal Adapter SC, FC</td>
<td>Universal Adapter SC, FC</td>
<td>Universal Adapter SC, FC</td>
<td>Universal Adapter SC, FC</td>
<td>Universal Adapter SC, FC</td>
<td>Universal Adapter SC, FC</td>
<td>Universal Adapter SC, FC</td>
<td></td>
</tr>
<tr>
<td>Output power control</td>
<td>Normal / Low</td>
<td>Normal / Low</td>
<td>Normal / Low</td>
<td>Normal / Low</td>
<td>Normal / Low</td>
<td>Normal / Low</td>
<td>Normal / Low</td>
<td></td>
</tr>
</tbody>
</table>

*1: Pulse light output point at 1625 nm and 1650 nm, ±15 dB or less, built-in 1310 & 1550 nm cut filter.
*2: 2.5 m is guaranteed
*3: At a point -20 dB from the pulse light output peak value, measured after 30 minutes or more power-on, at an ambient temperature of 23°C.
*4: At a point -60 dB from the pulse light output peak value, measured after 30 minutes or more power-on, at an ambient temperature of 23°C.
*5: SNR=1, Pulse width: 10 µs, measurement time: 3 minutes, When angled, -PC connectors are used, each dynamic range decreases by 0.5 dB.
*6: SNR=1, Pulse width: 20 µs, measurement time: 3 minutes, When angled, -PC connectors are used, each dynamic range decreases by 0.5 dB.
*7: Pulse width 3 ns, return loss: loss 55 dB or more
*8: 0.8 m is guaranteed
*9: Pulse width 10 ns, return loss 55 dB or more, at a point where the backscatter level is within ±0.5 dB of the normal value.
*10: At 1625 nm and 1650 nm
*11: Firmware Rev2.01 or later

Note: Specifications are at 23°C ±2°C unless otherwise noted.

Specifications per Option

**Light source & Optical powermeter option**

<table>
<thead>
<tr>
<th>Option</th>
<th>Optical Power meter (SPM)</th>
<th>Standard (SLT)</th>
<th>High Power (/HLT)</th>
<th>PON (/PPM)</th>
<th>Stabilized Light Source (/SLS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wavelength setting</td>
<td>850/1310/1490/1550/1625/1650 nm or 800 to 1700 nm (1 nm steps)</td>
<td>B50/1310/1490/1550/1625/1650 nm</td>
<td>1310/1490/1550 nm</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Power range</td>
<td>CW</td>
<td>+10 to -70 dBm</td>
<td>+27 to -90 dBm</td>
<td>+10 to -70 dBm, +27 to -90 dBm</td>
<td>---</td>
</tr>
<tr>
<td>Noise level</td>
<td>+7 to -80 dBm</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Uncertainty under standard conditions</td>
<td>0.5%</td>
<td>±0.5%</td>
<td>±0.5%</td>
<td>±0.5%</td>
<td>±0.5%</td>
</tr>
<tr>
<td>Repeatability</td>
<td>0.01</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Level unit</td>
<td>Absolute: dBm, mW, µW, mW Relative: dB</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Modulation mode</td>
<td>CW, CHOP (270 Hz/1 kHz/2 kHz)</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Average function</td>
<td>CW, CHOP (2/70 Hz/1/1 kHz/2 kHz)</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Light source</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Wavelength</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Optical output level</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Level stability</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Modulation mode</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Memory and logging function</td>
<td>---</td>
<td>Measurement data storage: 10 to 100 data, Logging interval: 0.5, 1, 2, 5, or 10 sec.</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Auto loss test function</td>
<td>---</td>
<td>Loss measurement with light source and optical powermeter interlock</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>

**Visible light source (VLS) option**

<table>
<thead>
<tr>
<th>Option</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optical connector</td>
<td>2.5 mm ferrule type</td>
</tr>
<tr>
<td>Center wavelength</td>
<td>650 nm ±20 nm</td>
</tr>
<tr>
<td>Optical output level</td>
<td>-3 dBm or more (peak)</td>
</tr>
<tr>
<td>Modulation mode</td>
<td>CHOP Approx. 2 Hz</td>
</tr>
<tr>
<td>Laser class</td>
<td>3M</td>
</tr>
</tbody>
</table>

**Ethernet interface option**

<table>
<thead>
<tr>
<th>Interface</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>10BASE T</td>
<td>---</td>
</tr>
<tr>
<td>100BASE TX</td>
<td>---</td>
</tr>
</tbody>
</table>

**Laser safety standard**

- Class 1 or Class 1M

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*2: 2.5 m is guaranteed
*3: At a point -20 dB from the pulse light output peak value, measured after 30 minutes or more power-on, at an ambient temperature of 23°C.
*4: At a point -60 dB from the pulse light output peak value, measured after 30 minutes or more power-on, at an ambient temperature of 23°C.
*5: SNR=1, Pulse width: 10 µs, measurement time: 3 minutes, When angled, -PC connectors are used, each dynamic range decreases by 0.5 dB.
*6: SNR=1, Pulse width: 20 µs, measurement time: 3 minutes, When angled, -PC connectors are used, each dynamic range decreases by 0.5 dB.
*7: Pulse width 3 ns, return loss: loss 55 dB or more
*8: 0.8 m is guaranteed
*9: Pulse width 10 ns, return loss 55 dB or more, at a point where the backscatter level is within ±0.5 dB of the normal value.
*10: At 1625 nm and 1650 nm
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**General Specifications**

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage temperature</td>
<td>-20 to 60°C</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>0 to 45°C (0 to 40°C when AC adapter is being used; 0 to 35°C when battery is being charged)</td>
</tr>
<tr>
<td>Humidity</td>
<td>20 to 85% RH (no condensation)</td>
</tr>
<tr>
<td>Power requirements</td>
<td>100 to 240 VAC, 50/60 Hz</td>
</tr>
<tr>
<td>Battery pack</td>
<td>Run time: 6 hours, Recharge time: 5 hours</td>
</tr>
<tr>
<td>Dimensions</td>
<td>217.5 (W) × 157 (H) × 74 (D) mm, excluding projections</td>
</tr>
<tr>
<td>Mass</td>
<td>Approx. 1.5 kg including battery pack</td>
</tr>
<tr>
<td>Safety</td>
<td>EN61010-1-1, EN61010-2-1, EN61010-3, EN50435, EN61223-1, EN6155013, IEC61010-1, EN61010-032</td>
</tr>
<tr>
<td>Immunity</td>
<td>EN61226-1, Table 2 (for industrial locations)</td>
</tr>
</tbody>
</table>

*1: In case measurement is performed for 30 seconds every 5 minutes, with no options installed, in power save mode (LCD brightness: Power save, Screen saving: ON).

*2: At temperature of 23°C, power OFF.

*3: At temperature of 23°C, power OFF.

*4: At temperature of 23°C, power OFF.

*5: At temperature of 23°C, power OFF.

**Model and suffix code**

<table>
<thead>
<tr>
<th>Model</th>
<th>Suffix code</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>AQ1200A</td>
<td>1310/1550 mm</td>
<td></td>
</tr>
<tr>
<td>AQ1200B</td>
<td>1625 mm</td>
<td></td>
</tr>
<tr>
<td>AQ1200C</td>
<td>1550 mm</td>
<td></td>
</tr>
<tr>
<td>AQ1200E</td>
<td>1310/1550 mm</td>
<td></td>
</tr>
<tr>
<td>AQ1200F</td>
<td>1310/1550 mm</td>
<td>High Dynamic Range, 1650 mm</td>
</tr>
<tr>
<td>AQ1205A</td>
<td>1310/1550 mm, High Dynamic Range</td>
<td></td>
</tr>
<tr>
<td>AQ1205E</td>
<td>1310/1550 mm, High Dynamic Range, 1625 nm</td>
<td></td>
</tr>
<tr>
<td>AQ1205F</td>
<td>1310/1550 mm, High Dynamic Range, 1650 mm</td>
<td></td>
</tr>
</tbody>
</table>

**Language**

- EN: English
- HI: Chinese
- HK: Chinese/English
- HR: Russian/English
- FR: French
- DE: German
- IT: Italian
- NL: Dutch
- RU: Russian
- CN: Chinese
- JP: Japanese
- BR: Brazilian
- AU: Australian
- IN: Indian
- KOR: Korean
- ESP: Spanish

**Power cord**

- D: UL/Caulk standard, 125 V
- E: VDE standard, 250 V
- F: VDE standard, 250 V
- R: Australian standard, 250 V
- G: BS/Singaporean standard, 250 V
- H: Chinese standard, 250 V
- P: Korean standard, 250 V
- T: Taiwanese standard, 125 V
- N: Brazilian standard, 250 V

**Optical connector**

- -FC: FC type
- -PC: PC type
- -APC: APC type
- -SC: SC type

**Light source & optical power meter**

- SLS: Stabilized light source & Standard optical power meter
- SSM: Stabilized light source & High power optical power meter
- SFC: Standard optical power meter

**Visible light source**

- VLS: Optical connector: 2.5 µm connector

**Application Software**

**Accessory (optional)**

<table>
<thead>
<tr>
<th>Model</th>
<th>Suffix code</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>SU2006A</td>
<td>.SC</td>
<td>Soft carrying case</td>
</tr>
<tr>
<td>735480</td>
<td>-FC</td>
<td>Connector adapter (FC)</td>
</tr>
<tr>
<td>735481</td>
<td>-FC</td>
<td>Connector adapter (FC)</td>
</tr>
<tr>
<td>SU2005A</td>
<td>.SC</td>
<td>Universal adapter (SC)</td>
</tr>
<tr>
<td>739847</td>
<td>-FC</td>
<td>Universal adapter (FC)</td>
</tr>
<tr>
<td>738882</td>
<td>-SC</td>
<td>Battery pack (Spare)</td>
</tr>
</tbody>
</table>

**Dimensions**

**Yokogawa’s Approach to Preserving the Global Environment**

- Yokogawa’s electrical products are developed and produced in facilities that have received ISO14001 approval.

- In order to protect the global environment, Yokogawa’s electrical products are designed in accordance with Yokogawa’s Environmentally Friendly Product Design Guidelines and Product Design Assessment Criteria.

**NOTICE**

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

If this product is for use with a system requiring safeguards that directly involve personnel safety, please contact the Yokogawa sales offices.

https://tmi.yokogawa.com/

YMI-KS-HMI-SE07

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