# AQ7275 OTDR
## Optical Time Domain Reflectometer

- **Wide range of models available**
- **Supporting FTTH to core networks**
- **Short dead zone (0.75 m)**
- **High dynamic range (45 dB)**

**Dead zone**
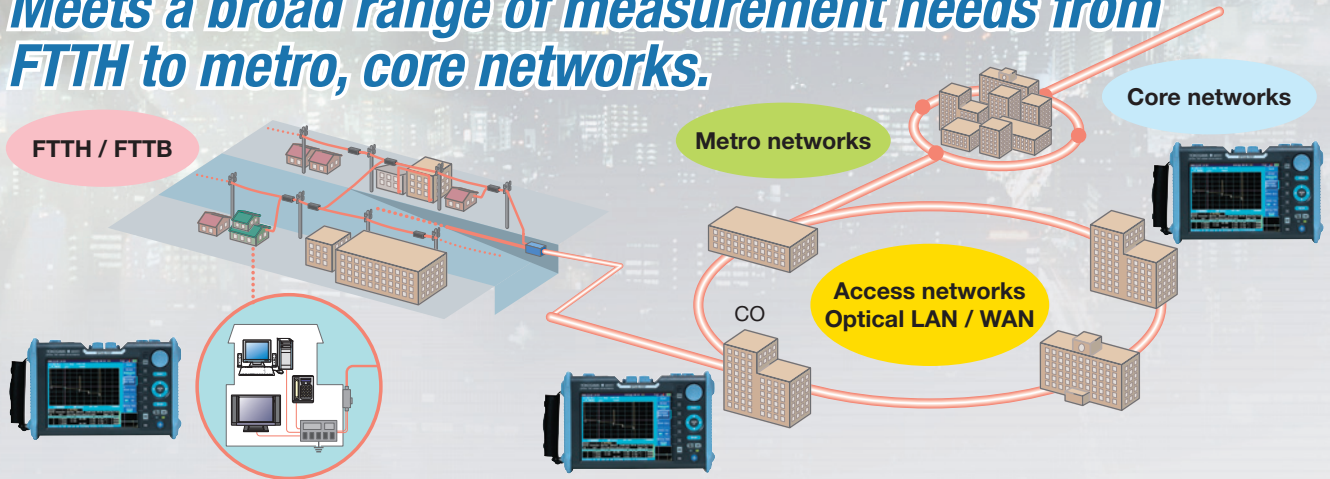**0.75m**

**Dynamic range**
**45dB**

For more information, go to
**tmi.yokogawa.com**
**Test & Measurement Instruments**

# Superior cost performance, easy to operate.
## Makes your work more efficient. ——

## Meets a broad range of measurement needs from FTTH to metro, core networks.

**FTTH / FTTB**

**Core networks**

**Metro networks**

**Access networks Optical LAN / WAN**

CO

## ● Event Dead Zone  0.75 m

The AQ7275's short event dead zone enables detection of closely spaced events in cables installed in offices and customer premises.

**0.75m Dead-zone**

| – 0.00477km | 1 m/div | SMP:5cm | 0.00523km |

Cursor:  0.00062km

→ 0.75m ←
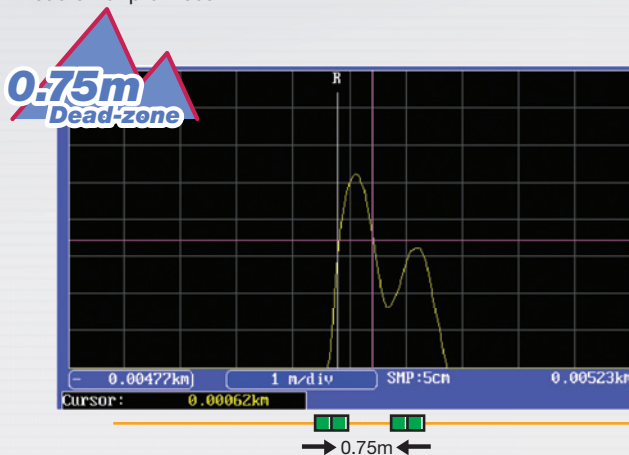
## ● High Dynamic Range up to 45 dB

The high dynamic range model (735034) can achieve the dynamic range of 45 dB. This high dynamic range is effective in measuring a transmission line consisting of long fiber cables and a splitter with a large loss.

**45dB Dynamic range**

| 0.00000km | 30km/div | SMP:8 m | 300.00000km |

Cursor    : 192.74602km
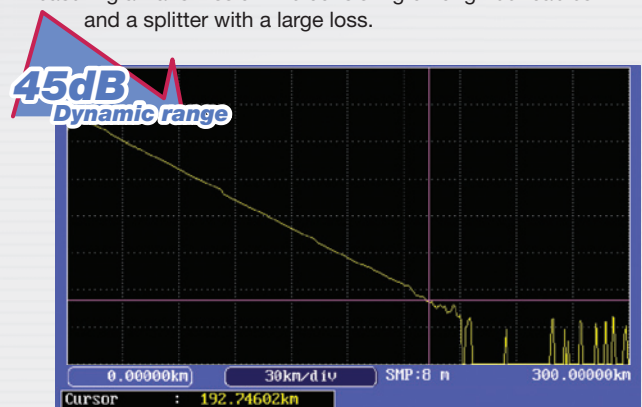
## ● Quick Startup within 10 Seconds

Now measurements can be started quickly upon arrival at the site. 10 seconds to power-up from completely OFF to fully ON! With such a fast power-up time, battery life can be extended by turning the power off while not in use at the job site without any concern about the power-up time when the next job is ready. It's ready when you're ready!

## ● Wide Range of Models Available

| Applicable fiber | No. of Wavelength | Wavelength | Dynamic range (typ) | Model | Descriptions |
|---|---|---|---|---|---|
| SMF | 1 | 1650nm | 37dB | 735031 | 1650nm model, supporting maintenance wavelength of 1650nm including 1310/1550nm cut filter. |
| | 2 | 1310/1550nm | 38/36dB | 735032 | Standard model for installation and maintenance of FTTH |
| | 2 | 1310/1550nm | 42/40dB | 735033 | Standard model for installation and maintenance of Metro and Access network |
| | 2 | 1310/1550nm | 45/43dB | 735034 | High dynamic range model for installation and maintenance of Core and Metro network |
| | 3 | 1310/1490/1550nm | 38/36/36dB | 735035 | 3-wavelength model for PON system, supporting 1490nm |
| | 3 | 1310/1550/1625nm | 42/40/36 dB | 735036 | Three-wavelength model, supporting a maintenance wavelength of 1625nm including 1310/1550nm cut filter |
| | 3 | 1310/1550/1650nm | 42/40/37dB | 735037 | Three-wavelength model, supporting a maintenance wavelength of 1650nm including 1310/1550nm cut filter. |
| | 3 | 1310/1550/1625nm | 42/40/38dB | 735038 | Three-wavelength model, supporting a maintenance  wavelength of 1625nm |
| MMF SMF | 4 | 850/1300nm 1310/1550nm | 42/40dB (SM) 25.5/26.5dB (50GI) | 735041 | Four-wavelength model for installation and maintenance of LAN  and FTTH with support for both multimode and single mode fiber. Dynamic range is specified when measuring 50GI fiber. |

# AQ7275 OTDR

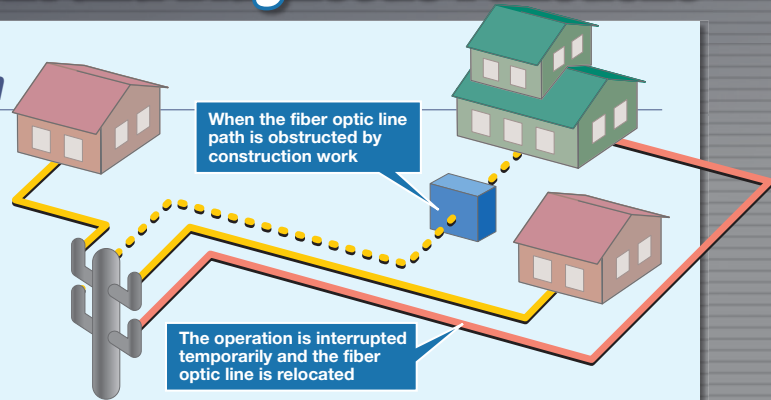# Convenient Data Management and Diagnostic Functions

## Multi Core Trace Comparison Function

Communication services must be interrupted when existing fiber optic cables are rerouted due to construction work of roads and buildings. This function minimizes the duration of the interruption by improving the efficiency of the rerouting work.

A waveform is measured before and after the work and compared against one another to determine a pass/fail condition using a user defined threshold criteria.

This function also enables the management of cores of a multicore fiber optic cable by number and color. This prevents the user from measuring a wrong core.

Numbers for measured cores are marked with check marks. This prevents the same core from being measured multiple times plus ensures no cores are overlooked.

When the fiber optic line path is obstructed by construction work

The operation is interrupted temporarily and the fiber optic line is relocated

Core numbers can be set in the measurement screen according to the names of the cores of a multi-core fiber optic cable.

The color scheme of cores of a multi-core cable varies depending on the manufacturer and the type of fiber cable. Three patterns are available by default. You can set any color scheme you like.
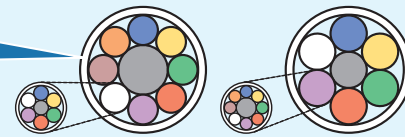
## Macro Bending Function (not available for the 735031)

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.

[Bending loss]
Loss is high when measured in the long wavelength region
Loss is low when measured in the short wavelength region

[Splicing loss]
Loss is the same when measured in both wavelength regions
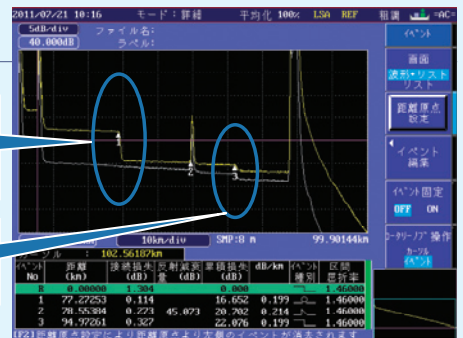
## Scheduling Function

Fiber optic networks are known to be subject to seasonal failures such as one caused by freezing. Such failures are restored automatically after several minutes to several hours. Thus the failure cannot be located due to the temporary nature of the fault.

The scheduling function performs measurements automatically in the specified period and saves the measurement data automatically to an external USB flash drive. The AQ7932 Emulation Software on a PC is used to call up the data before and after the fault event from a large amount of data automatically saved to the USB flash drive, and analyze the chronological changes in the waveform to locate the failure.

In addition, the remote control software provides support for measurements using the scheduling function, by providing a function to transfer the data stored in the USB flash drive to the PC via a network cable; a tool that detects a data file containing a change exceeding the threshold from a large number of data files; and a tool that batch calculates losses between two points.
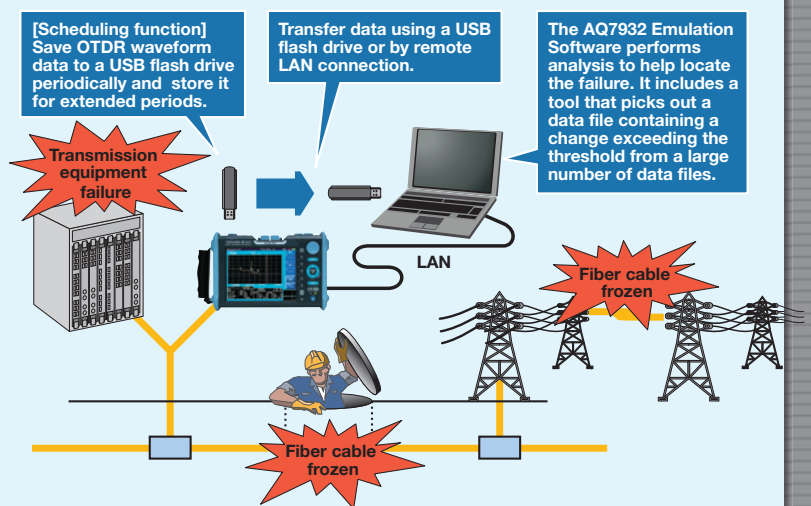
[Scheduling function]
Save OTDR waveform data to a USB flash drive periodically and store it for extended periods.

Transfer data using a USB flash drive or by remote LAN connection.

The AQ7932 Emulation Software performs analysis to help locate the failure. It includes a tool that picks out a data file containing a change exceeding the threshold from a large number of data files.

Transmission equipment failure

LAN

Fiber cable frozen

Fiber cable frozen

# Increase Working Efficiency

## 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 simply 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 AQ7932 Emulation Software greatly saves time to create file name table.



Multi fiber measurement function menu

**Making a table for fibers to be tested.**

**The fiber to be skipped can be selected.**

**Any of the fibers can be selected to execute the measurement.**

**The check-mark appears for the fiber that the measurement is completed.**

**The file name is created for the selected fiber automatically.**

**With the preview window, waveform can easily be confirmed.**
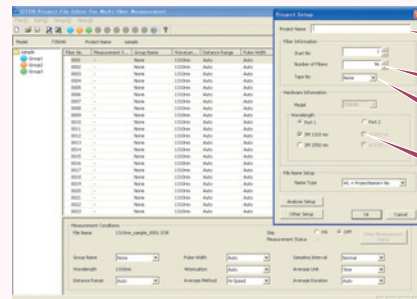


OTDR Project File Editor menu on PC

**Comment (Location...)**

**Number of core**

**Tape ID**

**Measuring conditions**

**[Project File]**
File name, Measuring conditions are stored as a table.

## Measured Data Analysis and Report Creation Tool –AQ7932 OTDR Emulation Software (Sold Separately)

AQ7932 is application software that performs analysis of trace data measured by AQ7270 and AQ7275 OTDR on a PC, and creates reports. The report creation wizard function makes this task simple. AQ7270 and AQ7275 OTDR data can be easily loaded onto a PC using USB memory or storage function.

### ■ Trace Analysis
You can edit event search conditions, approximate curve line settings, 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 a variety of 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 directions in the optical fiber.



### ■ OTDR Project File Editor for Multi Fiber Measurement
By registering a comment, number of cores, Tape ID, wavelength, etc., the OTDR Project File Editor creates "File name table" called "Project". It can be used in combination with Multi fiber measurement function available on AQ7270 and AQ7275.

### ■ Creating Reports
You can compile trace and measured values from trace files and creates a report. Reports can also be created in Excel and CSV formats. Reports can be created easily by just following the step-by-step instructions in the report wizard.



#### Functionality
File format: .SOR (Bellcore), .SOR (Telcordia [AQ7275, AQ7270, AQ7260]), .TRD (AQ7260), .TRB (AQ7250), .BMP (BMP), .CSV (Data CSV), .CSV (Event List CSV)
Report output format: Print output, CSV file, XLS file

#### Recommended Operating Environment (Software and Hardware)
OS: Microsoft Windows XP, Microsoft Windows Vista *, Microsoft Windows 7
Excel: Microsoft Excel 2000 or later (when the XLS file output function is used)
PC: 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
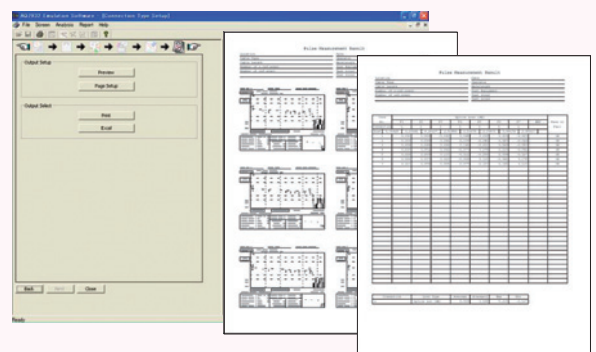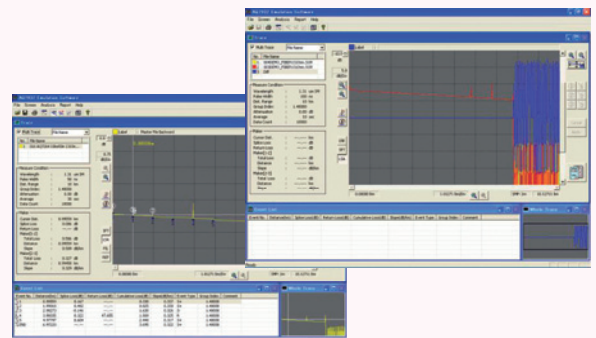
Microsoft Windows 7, Windows XP, and Windows Vista are registered trademarks or trademarks of Microsoft Corporation in the United States and other countries. The TM and ® symbols are not used to indicate registered trademarks and trademarks in this document.
(*) Microsoft Windows Vista is to be supported in Ver3.03 and later.

# Support Remote Monitoring

## Remote Control Software

OTDR can be remotely controlled from personal computer (PC) through Ethernet or the USB interface. The front panel image of connected OTDR is displayed on the screen of PC with remote control software, and OTDR can be controlled from PC by using the mouse by a similar sense of the operation of OTDR.
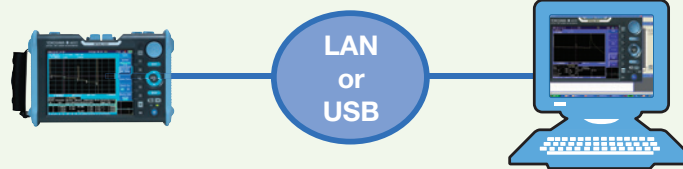
## AQ7940 for Intermittent Disconnection Monitoring

AQ7940 Optical Fiber Monitoring Software is for detecting and monitoring intermittent disconnection of optical fiber which is connected to OTDR. OTDR is controlled by personel computer (PC) through Ethernet or USB interface. Intermittent disconnection (200ms or more) can be detected and measured trace by OTDR can be stored in PC. By using this software point of intermittent disconnection can be located.

**LAN or USB**

# More Value Added to OTDR
## – Wider Range of Optional Functions

## Stabilized Light Source

This light source option can be used for measuring losses. It can also be used for optical fiber identification, because it is capable of outputting not only continuous wave (CW) light but also a 270-Hz modulated light.

* The stabilized light source option cannot be used for the 735041 (MMF).
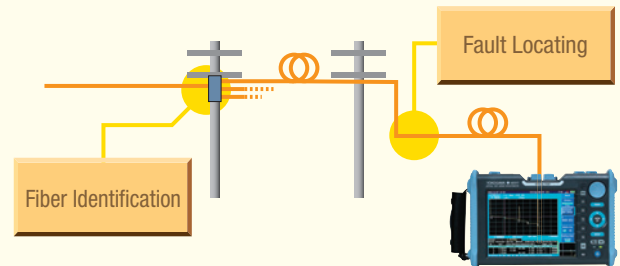
Fiber Identification

Loss Measurement

## Built-in Dummy Fiber

You can use the dummy fiber to effectively detect abnormal near-end connection loss.

* The dummy fiber option cannot be used for the 735041.
* The built-in dummy fiber is not attachable and removable.

**Measurement Connections in an Office**

Patch panel — To external network outside office — Patch cord — Built-in dummy fiber

**Fiber connection point/marker position**

Built-in dummy fiber — Connection loss — Fiber under test

## Angled-PC Connector

You can connect an optical fiber with an angled-PC connector directly to the OTDR. The angled PC is often used for CATV networks to reduce the influence of reflection.

## External Large Capacity Battery

The operation time will triple that of a standard built-in battery.

## Visible Light Source

This option can be used for identifying the multicore fiber cable and visually checking for a failure. The adopting the connector connection method enables the visible light to reach greater distances with less light leakage.
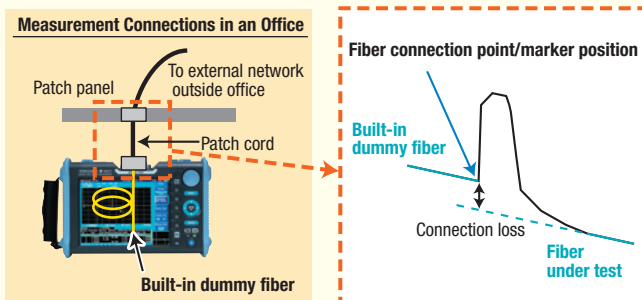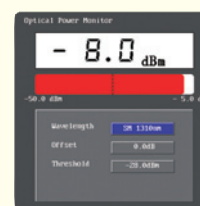
* The visible light source option cannot be applied for the 735036, 735037 and 735041.

Fault Locating

Fiber Identification

## Optical Power Monitor

This is useful for simply checking optical power when performing link loss testing or troubleshooting.

* The optical power monitor option cannot used for the 735031 and 735041 (MMF).

Fiber Identification
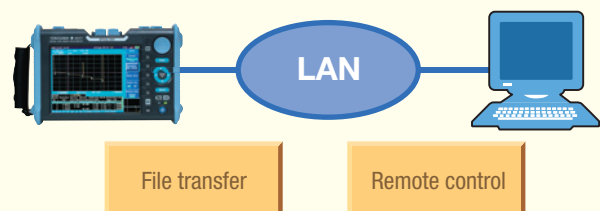
Power Check

## Printer/LAN

Measured results can be printed on site. It makes it easy to attach waveforms and results to your report. Remote control and FTP (file transfer) via LAN is also possible.

**LAN**

File transfer

Remote control

## Common Specifications

### Horizontal Axis Parameters

| | |
|---|---|
| Sampling resolution | 5 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 |
| Group refractive index | 1.30000 to 1.79999 (in 0.00001 steps) |
| Unit of distance | km, kf or miles |
| Distance measurement accuracy | Sum of the following 3 errors |
| | Offset error: $\pm 1$ m |
| | Scale error: Measurement distance $\times 2 \times 10^{-5}$ |
| | Sampling error: $\pm 1$ sampling resolution |
| | Excluding IOR uncertainty |

### Vertical Axis Parameters

| | |
|---|---|
| Vertical axis 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* | $\pm 0.05$ dB/dB |

*When the measuring loss is 1 dB or less, the accuracy is within $\pm 0.05$ 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. |
| Scheduling function | Performs measurements and saves results onto a USB storage in a user defined time frame and interval automatically. |

### OTDR Analysis Functions

| | |
|---|---|
| Analysis functions | Multi trace analysis, 2 way trace analysis, differential trace analysis, section analysis |

### Internal Memory

| | |
|---|---|
| Memory capacity | 1000 waveforms or more Can store measured waveforms and measurement conditions |

### Display

| | |
|---|---|
| Display | 8.4-inch color TFT LCD, semi-transparent |
| Total number of displayed pixels* | 640 (horizontal) $\times$ 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

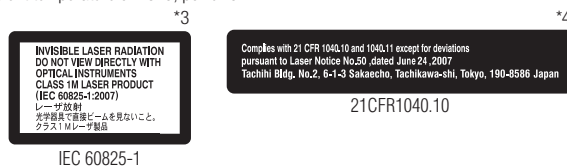| | |
|---|---|
| USB | USB1.1 Type A and Type B, one each |
| | Type A: For external memory |
| | Type B: For connecting to an external PC for remote control or access to the OTDR's internal memory. |

### File Formats

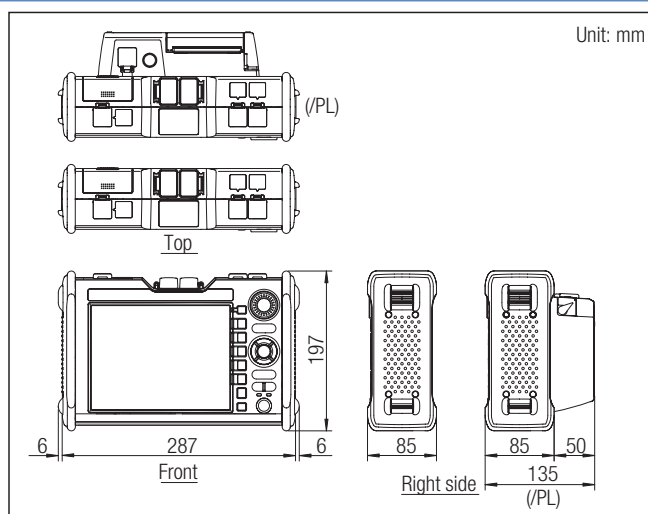| | |
|---|---|
| File formats | Read: SOR, TRD, TRB, SET (AQ7270/75) |
| | Write: SOR (Telcordia), SET, CSV, BMP, JPG, PNG |

### General Specifications

| | |
|---|---|
| Operating environment | Temperature  0 to 45°C (0 to 35°C when charging the battery) Humidity  85% RH or less (no condensation) |
| Storage temperature | -20 to 60°C |
| Battery | Operation time 6 hours (18 hours with external large capacity battery)[1] Recharge time 5 hours [2] |
| Rated power voltage | 100 to 240 VAC |
| Rated supply frequency | 50 to 60 Hz |
| Power consumption | Max 70 W (when charging battery and printing with optional printer) |
| Dimensions | (W) 287 $\times$ (H) 197 $\times$ (D) 85 mm (excluding projections or options) |
| Weight | Approx. 2.8 kg (excluding options) |
| Laser safety standards | Class 1 M (IEC 60825-1:2007)[3] 21CFR1040.10[4] |
| Safety standard | EN61010-1 |
| Emission | EN61326-1 Class A |
| | EN55011 Class A Group 1 |
| Immunity | EN61326-1 Table 2 |

[1]  Measurement for 30 seconds in every 10 minutes without any options and in power save mode (Auto Power OFF 1 minute)
[2]: Ambient temperature of 23°C, power OFF

*3

INVISIBLE LASER RADIATION
DO NOT VIEW DIRECTLY WITH
OPTICAL INSTRUMENTS
CLASS 1M LASER PRODUCT
(IEC 60825-1:2007)
レーザ放射
光学器具で直接ビームを見ないこと。
クラス1Mレーザ製品

IEC 60825-1

*4

Complies with 21 CFR 1040.10 and 1040.11 except for deviations
pursuant to Laser Notice No.50 ,dated June 24 ,2007
Tachihi Bldg. No.2, 6-1-3 Sakaecho, Tachikawa-shi, Tokyo, 190-8586 Japan

21CFR1040.10

### External Dimensions



Unit: mm

(/PL)

Top

197

6    287    6     85      85   50

Front          Right side    135
                            (/PL)

## Specifications by Model

| Model | 735031 [*11] | 735032 | 735033 | 735034 | 735035 |
|---|---|---|---|---|---|
| Wavelength [*13] | 1650±5nm[*1], ±10nm[*2] | 1310/1550±25 nm | 1310/1550±25 nm | 1310/1550±25nm | 1310/1490/1550±25nm |
| Applicable fiber | SM (ITU-T G.652) | | | | |
| Distance range | 500m, 1km, 2km, 5km, 10km, 20km, 50km, 100km, 200km, 300km, 400km, 512km | | | | |
| Pulse width [*3] | 3ns, 10ns, 20ns, 50ns, 100ns, 200ns, 500ns, 1µs, 2µs, 5µs, 10µs, 20µs | | | | |
| Dynamic range (typ) | 37 dB [*4] | 38/36 dB [*4] | 42/40 dB [*4] | 45/43 dB [*4] | 38/36/36 dB [*4] |
| Event dead zone (typ) [*10] | 0.75 m [*5] | 0.75 m [*5] | 0.75 m [*5] | 0.75 m [*5] | 0.75 m [*5] |
| Attenuation dead zone (typ) [*10] | 12 m [*6] | 7/8 m [*6] | 7/8 m [*6] | 7/8 m [*6] | 7/8/8 m [*6] |

| Model | 735036 [*11] | 735037 [*11] | 735038 | 735041 |
|---|---|---|---|---|
| Wavelength [*13] | 1310/1550±25 nm 1625±25 nm | 1310/1550±25 nm 1650±5nm[*1], ±10nm[*2] | 1310/1550/1625±25 nm | 1310/1550±25nm       850/1300±30nm |
| Applicable fiber | SM (ITU-T G.652) | | | GI (62.5/125µm, 50/125µm) |
| Distance range | 500m, 1km, 2km, 5km, 10km, 20km, 50km, 100km, 200km, 300km, 400km, 512km | | | 500m, 1km, 2km, 5km, 10km, 20km, 50km, 100km |
| Pulse width [*3] | 3ns, 10ns, 20ns, 50ns, 100ns, 200ns, 500ns, 1µs, 2µs, 5µs, 10µs, 20µs | | | 3ns, 10ns, 20ns, 50ns, 100ns, 200ns, 500ns, 1µs, 2µs, 5µs [*8] |
| Dynamic range (typ) | 42/40/36 dB [*4] | 42/40/37dB [*4] | 42/40/38 dB [*4] | 42/40 dB [*4]     25.5/26.5 dB (50/125µm) [*8] |
| Event dead zone (typ) [*10] | 0.75 m [*5] | 0.75 m [*5] | 0.75 m [*5] | 0.75 m [*5]     0.9 m [*5] |
| Attenuation dead zone (typ) [*10] | 7/8/12 m [*6] | 7/8/12 m [*6] | 7/8/12 m [*6] | 7/8 m [*6]     6/10 m [*12] |

*1 At a point -20 dB from the pulse light output peak value (measured 30 minutes or more after power-on at an ambient temperature of 23°C)
*2 At a point -60 dB from the pulse light output peak value (measured 30 minutes or more after power-on at an ambient temperature of 23°C)
*3 Pulse width setting range depends on the distance range
*4 SNR:1, pulse width: 20 µs, distance range: 200 km, sampling resolution: 8 m, measurement time: 3 minutes. When built-in dummy fiber and angled-PC connector are used, each dynamic range decreases by 0.5 dB. Guaranty value [dB]; 30 (735031), 34/32 (735032), 40/38 (735033), 43/41 (735034), 34/30/32 (735035), 40/38/33 (735036), 40/38/30 (735037), 40/38/36 (735038), [SM] 40/38 [GI50/125] 21.5/23 [GI62.5/125] 22.5/24 (735041)
*5 Pulse width of 3 ns, return loss of 45 dB or more at a point 1.5 dB below the peak value (not saturated). Guaranty value is 0.8m
*6 Pulse width of 10 ns and return loss of 45 dB or more at a point where the backscatter level is within ±0.5 dB of the normal value
*7 Pulse width of 2 or 5 µs when the measured wavelength is 1300 nm
*8 SNR = 1 at pulse width of 500 ns (850 nm) and 1 µs (1300 nm), sampling resolution of 8 m, and measurement time of 3 minutes
*9 Pulse width of 3 ns and return loss of 40 dB or more at a point 1.5 dB below the peak value (not saturated). Guaranty value is 1.0m
*10 At group reflective index 1.5
*11 Pulse light output power at 1625 nm and 1650nm, 15dBm or less, built-in 1310/1550nm cut filter
*12 Pulse width of 10ns and return loss of 40dB or more at a point where the backscatter level is within ±0.5dB of the normal value
*13 Pulse width of 1 µs
Note: Specifications without any special remarks are assured at 23°C±2°C

## Factory Installed Optional Specifications

### Stabilized Light Source Function (/SLS option)

| | |
|---|---|
| Optical connector | Shared with the OTDR (at the same port) |
| Center wavelength | OTDR's center wavelengths |
| Light output level | -5 dBm or more (at 23°C±2°C) |
| Output level stability | ±0.1 dB (±0.15 dB for 1650 nm) |
| (Constant temperature for 5 minutes) | |
| Modulation frequency | CW, 270 Hz |

* Unavailable for the 735041 (MMF)

### Visible Light Source (/VLS option)

| | |
|---|---|
| Optical connector | Port is not shared with the OTDR |
| Center wavelength | 650 nm ± 20 nm |
| Light output level | Peak value -3 dBm or more |
| Modulation frequency | 2 Hz |
| Laser safety standard | Class 3R |

*Unavailable for the 735036, 735037 and 735041

INVISIBLE LASER RADIATION
DO NOT VIEW DIRECTLY WITH
OPTICAL INSTRUMENTS
CLASS 1M LASER PRODUCT
(IEC 60825-1:2007)
レーザ放射
光学器具で直接ビームを見ないこと。
クラス1Mレーザ製品

### Power Monitor Function (/PM option)

| | |
|---|---|
| Optical connector | Shared with the OTDR (at the same port) (735036, 735037 : 1310/1550 nm port) |
| Measurement wavelength | 1310, 1490, 1550, 1625, 1650 nm |
| Measurement range[*1] | -50 to -5 dBm |
| Measurement accuracy[*2] | ± 0.5 dB |

*1 CW light, absolute maximum input level 0 dBm (1 mW)
*2 CW light, wavelength 1310 nm, -10 dBm for input, 23°C±2°C
*Unavailable for the 735031 and 735041 (MMF)

### PON measurement (/PN option)

| | |
|---|---|
| Applicable models | 735031, 735033, 735036, 735038 |
| Dynamic range | 25/25/23/19dB (typ) |
| | (1310nm/1550nm/1625nm/1650nm) |
| Applicable pulse width | 50ns, 100ns, 200ns, 500ns, 1µs |

* Dynamic range is for the 100ns of pulse width.

* At pulse widths not applicable to the PON option, the performance is equal to the standard model.

### High Dynamic range (/DR option)

| | |
|---|---|
| Applicable model | 735032 |
| Dynamic range (Guaranty) | 36dB (1310nm) / 34dB (1550nm) |

* SNR:1, pulse width: 20 µs, distance range: 200 km, sampling resolution: 8 m, measurement time: 3 minutes. When built-in dummy fiber and angled-PC connector are used, each dynamic range decreases by 0.5 dB

### Built-in Printer/LAN Function (/PL option)

| | |
|---|---|
| Printing method | Thermal line-dot |
| Dot density | 576 dots/line |
| Paper width | 80 mm |
| Operating environment | Temperature   0 to 40°C |
| | Humidity     10 to 80% RH (no condensation) |
| Storage temperature | -20 to 60°C |
| LAN function | 10BASE-T/100BASE-TX (RJ-45) x1 |

### Dummy Fiber (/DF option)

| | |
|---|---|
| Optical fiber | SM (ITU-T G.652) |
| Optical fiber length | Approx. 100 m |

* Dynamic range declines by 0.5 dB as a result of the addition of the fiber option.

* Unavailable for the 735041

# Optical Time Domain Reflectometer *AQ7275* OTDR

## Model and Suffix Code

### AQ7275 OTDR

| Model | Optical power monitor | Stabilized light source | Visible light source | PON measure-ment | High Dynamic range | Printer/ LAN | Dummy fiber | Remarks |
|---|---|---|---|---|---|---|---|---|
| | Option availability | | | | | | | |
| 735031 | — | √ | √ | √ | — | √ | √ | 1-port, SM1650nm, filter |
| 735032 | √ | √ | √ | — | √ | √ | √ | 1-port, SM1310/1550 nm |
| 735033 | √ | √ | √ | — | √ | √ | √ | 1-port, SM1310/1550 nm, High DR |
| 735034 | √ | √ | √ | — | — | √ | √ | 1-port, SM1310/1550 nm, Higher DR |
| 735035 | √ | √ | √ | — | — | √ | √ | 1-port, SM1310/1490/1550 nm |
| 735036 | √ | √ | — | √ | — | √ | √ | 2-port, SM1310/1550/1625 nm, filter |
| 735037 | √ | √ | — | — | — | √ | √ | 2-port, SM1310/1550/1650 nm, filter |
| 735038 | √ | √ | √ | — | — | √ | √ | 1-port, SM1310/1550/1625 nm |
| 735041 | √*1 | √*1 | — | — | — | √ | — | 2-ports, MM850/1300 nm, SM1310/1550 nm |

*1 : MMF is not supported.
√ : Available.

| | Suffix Codes | Description |
|---|---|---|
| Optical Connector | -SCC | SC type connector |
| | -FCC | FC type connector |
| | -NON | No universal adapter |
| | -USC | Universal adapter (SC) |
| | -UFC | Universal adapter (FC) |
| | -ASC | Angled-PC connector (SC) *2 |
| Language | -HE | English |
| | -HC | Chinese/English |
| | -HK | Korean/English |
| | -HR | Russian/English |
| Power Cord | -D | UL/CSA standard |
| | -F | VDE standard |
| | -R | AS standard |
| | -Q | BS/Singapore standard |
| | -H | GB standard, Complied with CCC |
| | -P | Korean standard |
| Options | /PM | Optical power monitor |
| | /SLS | Stabilized light source |
| | /VLS | Visible light source |
| | /PN | PON measurement |
| | /DR | High Dynamic range |
| | /PL | Built-in printer, LAN |
| | /DF | Dummy fiber (SMF) |
| | /SB | Shoulder belt |

*2: An angled-PC connector cannot be used in the MM port of the 735040. -USC needs to be attached.

**Example: 735033-USC-HE-D/PM/SLS**
AQ7275 OTDR 1310/1550nm, high dynamic range, with SC universal adapter, English version, with a UL/CSA standard power cord, with optical power monitor function and with stabilized light source function.

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

## Accessories (Sold Separately)

| Name | Model | Specifications |
|---|---|---|
| Soft carrying case | 739860 | |
| Battery pack | 739880 | |
| External large capacity battery | 739881 | With battery case and connection cable |
| Universal adapter (SC) | SU2005A-SCC | SC type |
| Universal adapter (FC) | SU2005A-FCC | FC type |
| Printer roll paper | A9010ZP | 80 mm x 25 m |
| Shoulder belt | B8070CY | |
| AC adapter | 739870-D | UL/CSA standard |
| | 739870-F | VDE standard |
| | 739870-R | AS standard |
| | 739870-Q | BS/Singapore standard |
| | 739870-H | GB standard, Complied with CCC |
| | 739870-P | Korean standard |

## Application Software

| Model | Suffix Codes | Specifications |
|---|---|---|
| 735070 | | AQ7932 Emulation Software (Ver3.0 or later) |
| | -EN | English |
| 735071 | | AQ7940 Optical fiber Monitoring Software |
| | -EN | English/Japanese |

## Related Products

### AQ1200 MFT-OTDR
**Multi Field Tester OTDR**

All-in-One Handheld optical fiber network test tool
- OTDR
- Light source & Optical Powermeter
- Auto Loss Test
- Multicore Loss Testing
- Visible Light Source
- Fault Locator
- PING Test
- Video Fiber Inspection Probe ... etc

### AQ1100 MFT-OLTS
**Light Source + Optical Power Meter**

Light Sources (3 models)
SM1310/1550 nm, SM1310/1550/1625 nm
MM850/1300 nm and SM1310/1550 nm

Optical Power Meter Selections
Standard : +10 to -70 dBm
High power : +27 to -50 dBm
PON : 1490/1550 nm
Parallel measurement (split)

# YOKOGAWA ◆
## Yokogawa Meters & Instruments Corporation