

# Optical Time Domain Reflectometer

### Description

The Multicom MUL-OTDR-200 OTDR handheld Optical Time Domain Reflectometer is a new generation of intelligent optical-fiber test equipment. It is widely used in the construction, maintenance, measurement, and emergency repair of optical-fiber communication systems networks as well as the development, manufacturing and measurement of optical fibers and optical cables.

#### The OTDR is able to Measure and Display:

- Length of optical fiber
- Distance between any two points in the curves of optical fiber
- Loss between any two points in the curves (dB)
- Connecting loss at the joints of the curves
- Value of reflection loss
- Distance between two event points
- Loss between two event points
- Average loss between two event points
- Waveform storage

## The OTDR is also able to:

- Identify the connecting fault and disconnecting locations of optical fibers and optical cables
- Indicate the power level of intelligent batteries
- Work as a real-time measurement instrument, this increases the convenience on observing real-time connecting effects/events of optical fibers

### **Additional Features**

- Graphical window operating interface
- VFL (Visual Fault Location) function
- Color LCD display
- Handheld device, light, easy to carry, solid and durable
- · Intelligent battery power indicator & auto power-off at low voltage
- Able to transfer data to PC via USB cable



## MUL-OTDR-200



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## **Product Specifications**

#### **Features**

• Color LCD display

- Graphical window operating interface
  VFL (Visual Fault Location) function
- Handheld device, light, easy to carry, solid and durable
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### **Technical Specifications**

| Parameter                                 | MUL-OTDR-200  | MUL-OTDR-300        |
|---|---|---------------------|
| Wavelength                                | 1310/1550nm ±20nm   | 1310/1550nm ±20nm   |
| Type of compatible applicable fibers      | Singlemode  | Singlemode          |
| Dynamic Range                             | 15/16dB (40-50km)   | 30/32dB (100-110km) |
| Minimum event deadzone                    | 1.6m (singlemode)   |                     |
| Ranging accuracy                          | $\pm$ (1m + sampling interval + 0.003% x distance), (excluding refractive index imbedding error)  |                     |
| Resolution of ranging                     | 12 - 16m  |                     |
| Loss threshold value                      | 0.01dB  |                     |
| Linearity                                 | 0.05dB/dB   |                     |
| VFL output power                          | 5mW   |                     |
| Measurement range                         | 4, 8, 16, 32, 48, 64, 128, 256km (singlemode)   |                     |
| Pulse width                               | 10, 30, 80, 160, 320, 640, 1280, 2560, 102 <mark>40ns</mark>  |                     |
| Number of sampling points                 | 65K   |                     |
| Waveform storage capacity                 | 1,000 frames  |                     |
| Range of refractive index                 | 1.00000 ~ 2.00000   |                     |
| Range of optical-cable corrrection factor | 0.800000 ~ 1.00000  |                     |
| LCD display                               | 640 x 480, 5.1" color   |                     |
| Port                                      | USB   |                     |
| Optical output port                       | FC/PC   |                     |
| Power supply                              | AC/DC adapter<br>AC input: 100V ~ 240V (1.5A)<br>Output DC: 9V (2A)<br>Power frequency: 50Hz ~ 60Hz<br>Internal lithium battery: 7.4V, 4400mAh<br>Working battery life: 10 hours @ normal t | emperature          |
| Menu language                             | English   |                     |
| Storage Tempurature                       | -40 ~ 70°C (-40 ~ 158°F) exclusive of battery   |                     |
| Relative humidity                         | 5-95%, no condensation  |                     |
| Dimensions                                | 215mm L x 130mm H x 66mm W  |                     |
| Weight                                    | ~ 1kg (~2.2 lbs)  |                     |

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-Optical Time Domain Reflectometer

-Multicom

-Model: 200, 300

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\*Specifications subject to change without notice