



Fiblit

PN: FLVFL-5MW

Optical Fiber Tools

## TECHNICAL DATA SHEET

**Visual Fault Locator VFL Fiber Optic Cable Tester**  
**Meter 5 mW 5 km**





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## Visual Fault Locator VFL Fiber Optic Cable Tester Meter 5 mW 5 km

### Product Description

The 5mW Visual Fault Locator (VFL) is a portable fiber optic cable testing instrument designed for rapid fault detection, fiber identification, and continuity testing. It emits a 650 nm visible red laser capable of tracing optical fibers over distances of up to 5 km, enabling technicians to quickly locate fiber breaks, macro-bends, poor splices, and connector defects.

The device features a rugged aluminum alloy housing, a universal 2.5 mm optical interface compatible with FC, SC, and ST connectors, and supports both continuous (CW) and pulsed laser output modes. Its compact design and long battery life make it an ideal tool for FTTH deployments, telecom maintenance, CATV networks, and data center installations.

#### Parameter introduction

|                        |                    |
|------------------------|--------------------|
| Output optical power:  | 5/10/20/30mW       |
| type of battery:       | 2.5 volt batteries |
| product material:      | Aluminum alloy     |
| Applicable fiber:      | SM/MM              |
| Operating temperature: | -10-40 °C          |
| product quality:       | 150g               |
| Output wavelength:     | 650±10nm           |
| storage temperature:   | -40-85°C           |
| Product Size:          | 24x170mm           |



### Features

- 5 mW visible red laser output
- Maximum testing distance up to **5 km**
- 650 ±10 nm laser wavelength
- Continuous (CW) and pulsed operating modes
- Universal **2.5 mm adapter** for FC, SC, and ST connectors
- Optional **1.25 mm adapter** for LC connectors
- Compact, lightweight handheld design
- Durable aluminum alloy housing
- One-button operation
- Long battery operating time



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- Low power consumption
- Dust-proof protective cap
- CE and RoHS compliant

## **Applications**

- Fiber continuity testing
- Fiber break detection
- Fiber identification
- Fusion splice inspection
- Connector fault location
- FTTH installation and maintenance
- Optical Distribution Frames (ODF)
- Telecommunications networks
- CATV systems
- Enterprise LANs
- Data Centers



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## Technical Specifications

| Parameter             | Specification                 |
|-----------------------|-------------------------------|
| Laser Wavelength      | 650 $\pm$ 10 nm               |
| Laser Output Power    | 5 mW                          |
| Maximum Test Distance | Up to 5 km                    |
| Laser Class           | Class IIIR                    |
| Output Modes          | Continuous (CW) / Pulsed      |
| Pulse Frequency       | 2–3 Hz                        |
| Connector Interface   | Universal 2.5 mm (FC, SC, ST) |
| Optional Adapter      | 1.25 mm (LC)                  |
| Power Supply          | 2 $\times$ AA Batteries       |
| Battery Life          | $\geq$ 20 Hours (Typical)     |
| Operating Temperature | -10°C to +50°C                |
| Storage Temperature   | -20°C to +70°C                |
| Relative Humidity     | $\leq$ 90% (Non-condensing)   |
| Housing Material      | Aluminum Alloy                |
| Dimensions            | Approx. 175 $\times$ 26 mm    |
| Weight                | Approx. 180 g                 |



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## **Mechanical Specifications**

| <b>Item</b>         | <b>Specification</b> |
|---------------------|----------------------|
| Housing Material    | Aluminum Alloy       |
| Surface Finish      | Anodized Anti-slip   |
| Connector Interface | Universal 2.5 mm     |
| Dust Protection     | Protective Dust Cap  |
| Portable Design     | Yes                  |

## **Environmental Performance**

| <b>Test Item</b>      | <b>Condition</b> | <b>Requirement</b>   |
|-----------------------|------------------|----------------------|
| Operating Temperature | -10°C to +50°C   | Normal Operation     |
| Storage Temperature   | -20°C to +70°C   | Normal Performance   |
| Humidity              | ≤90% RH          | Non-condensing       |
| Drop Test             | 1 m              | No Functional Damage |



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## **Package Contents**

- 5 mW Visual Fault Locator
- Protective Carrying Pouch
- User Manual
- Wrist Strap

## **Safety Notice**

- Do not look directly into the laser beam.
- Never point the laser toward people or reflective surfaces.
- Always install the dust cap when the device is not in use.
- Store the device in a clean and dry environment.
- This product uses a **Class IIIR laser**; follow all applicable laser safety procedures.