



Fiblit

PN: FLVFL-20KM

Optical Fiber Tools

TECHNICAL DATA SHEET

**High Power Fiber Optic Visual Fault Locator (VFL) –
30mW, 20 km**





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High Power Fiber Optic Visual Fault Locator (VFL) **– 30mW, 20 km**

Product Description

The 30mW Fiber Optic Visual Fault Locator (VFL) is a portable fiber testing tool designed for quick identification of fiber breaks, bends, poor splices, and connector faults. It emits a 650 nm visible red laser that travels through the optical fiber, allowing technicians to visually locate faults over distances up to 20 km. Featuring a rugged aluminum alloy housing, universal 2.5 mm adapter, and both continuous (CW) and pulsed operating modes, the VFL is an essential maintenance tool for FTTH installations, telecom networks, CATV systems, data centers, and fiber optic laboratories.



Features

- High-power **30 mW** red laser output
- Visible laser wavelength of **650 ±10 nm**
- Testing distance up to **20 km**
- Universal **2.5 mm adapter** compatible with FC, SC and ST connectors
- Optional 1.25 mm adapter for LC connectors
- Continuous (CW) and pulsed output modes
- Rugged aluminum alloy body
- Compact, lightweight, and portable



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- Long battery life
- Easy one-button operation
- Low power consumption
- Dust-proof protective cap
- CE and RoHS compliant

Applications

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



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Technical Specifications

Parameter	Specification
Laser Wavelength	650 ±10 nm
Laser Output Power	30 mW
Test Distance	Up to 20 km
Laser Class	Class III B
Output Mode	Continuous (CW) / Pulsed
Optical Connector	Universal 2.5 mm (FC, SC, ST)
Optional Adapter	1.25 mm (LC)
Operating Frequency	2–3 Hz (Pulse Mode)
Power Supply	2 × AA Batteries
Battery Life	≥ 20 Hours (Typical)
Operating Temperature	-10°C to +50°C
Storage Temperature	-20°C to +70°C
Relative Humidity	≤ 90% (Non-condensing)
Housing Material	Aluminum Alloy
Color	Red / Black
Dimensions	Approx. 175 × 26 mm
Weight	Approx. 180 g



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Mechanical Specifications

Item	Specification
Housing Material	Aluminum Alloy
Connector Interface	Universal 2.5 mm
Protection Cap	Dust-proof
Body Finish	Anodized Anti-slip Surface
Portable Design	Yes

Environmental Performance

Test Item	Condition	Requirement
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

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

Safety Notice

- Avoid direct exposure of the laser beam to the eyes.
- Never point the laser toward people or reflective surfaces.
- Always keep the protective cap installed when not in use.
- Store the device in a dry, dust-free environment.