



Fiblit

PN: FLVFL-30KM

Optical Fiber Tools

TECHNICAL DATA SHEET

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





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

Product Description

The 30mW Fiber Optic Visual Fault Locator (VFL) is a professional handheld fiber testing instrument designed to quickly identify fiber breaks, bends, poor splices, connector defects, and continuity faults. It emits a 650 nm visible red laser capable of tracing optical fibers over distances of up to 30 km, making it suitable for long-distance fiber optic network maintenance.



Constructed with a durable aluminum alloy housing and equipped with a universal 2.5 mm connector interface, the VFL supports FC, SC, and ST connectors, with an optional adapter for LC connectors. Continuous (CW) and pulsed operating modes provide flexibility for fault detection in FTTH, CATV, telecommunications, data centers, and enterprise fiber networks.

Features

- High-power 30 mW visible red laser output
- Testing distance up to 30 km
- 650 $\pm$ 10 nm laser wavelength
- Continuous (CW) and pulsed operating modes
- Universal 2.5 mm adapter compatible with FC, SC, and ST connectors
- Optional 1.25 mm adapter for LC connectors
- Rugged aluminum alloy body with anti-slip finish
- Compact and lightweight handheld design
- Long battery operating life



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- One-button operation
- Dust-proof protective cap
- CE and RoHS compliant

Applications

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



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Technical Specifications

Parameter	Specification
Laser Wavelength	650 ±10 nm
Laser Output Power	30 mW
Maximum Test Distance	Up to 30 km
Laser Class	Class III B
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 × 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
Dimensions	Approx. 175 × 26 mm
Weight	Approx. 180 g



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Mechanical Specifications

Item	Specification
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

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

- Never look directly into the laser beam.
- Do not point the laser at people or reflective surfaces.
- Keep the protective cap installed when the device is not in use.
- Store in a dry and clean environment.
- This product uses a **Class III B laser**; operate according to laser safety guidelines.