



technical data sheet

Product Code :	2040392
Description :	QFL – VISUAL FAULT LOCATOR FOR OPTICAL FIBERS (VFL)



Description

The Qubix QFL visual fault locator is a compact and lightweight portable instrument designed for the fast, visual identification of breaks, macrobends, faulty splices, and damaged connectors on fiber optic patch cords and cables up to a distance of 5 km. It represents the ideal complement to an OTDR, allowing precise pinpointing of defects and anomalies located within the first few meters of fiber or inside the instrument's dead zones. Thanks to its 2.5 mm universal connector, the device ensures full compatibility with major optical connector standards and is ready for immediate use with no warm-up time required.

Key features

- Operating range: effective visual fault tracing coverage up to 5 km.
- Compact pen-style design: robust, ergonomic, and lightweight structure.
- Ready to use: immediate startup with zero warm-up time.
- Operating modes: continuous wave (CW) or modulated pulse emission.
- Advanced protection: electrostatic discharge (ESD) resistance up to 8 kV, with a dust- and shock-resistant body.
- Compliance: CE certified.

Technical specifications

Parameter	Product specifications
Laser type	Fabry-Pérot Laser Diode (FP-LD)
Wavelength	650 nm $\pm$ 10 nm
Output power	1 mW
Detection distance	Up to 5 km
Operating modes	Continuous Wave (CW) / Modulated
Modulation frequency	2 - 3 Hz
Output connector	2.5 mm universal adapter (SC, ST, FC)
Power supply	2 $\times$ 1.5V AA alkaline batteries (not included)
Battery life	$\geq$ 50 hours
Operating temperature	-10 °C $\div$ +45 °C
Storage temperature	-40 °C $\div$ +70 °C
Dimensions and weight	180 $\times$ ϕ 15 mm; 120 g (excluding batteries)



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Quick operation guide

1. Battery installation

- Unscrew the tail cap of the instrument and insert the batteries following the polarity indications marked on the internal label.

2. Interface preparation

- Remove the dust cap protecting the optical laser head.

3. Fiber connection

- Plug the optical fiber connector into the light output port. The unit directly supports 2.5 mm ferrules and can accommodate 1.25 mm ferrules using an optional adapter.

4. Mode selection and power on

- Press the Mode/Power button to toggle through the operating modes: continuous emission, flashing (pulsed) emission, and power off.

5. LED status indicator

- Solid green: continuous emission mode active.
- Flashing green: pulsed mode active.
- Red (solid or flashing): low battery level.

6. Power off and protection

- Power off the device and immediately replace the dust cap to protect the optical port.

Safety warnings

- Laser safety: never look directly into the laser output port or the end of an optical fiber when the instrument is powered on.
- ESD protection: the device features electrostatic discharge protection up to 8 kV, but operating in suitable, controlled environments is still recommended.