650nm Model HA004-1 VFL (Pen-style Visual Fault Locator)

The HA004-1 VFL is specially designed for field and lab personnel who need an efficient and economical tool for fiber tracing, fiber routing, end-to-end visual fiber identification and continuity checking in optical networks. It aids in the detection of breakpoints, poor connections, bending or cracking in fiber optic cables and can also be used to find faults in an OTDR dead zone.

HELIX Analytix Inc



Applications:

- * Maintenance in Telecom, CATV Networks.
- * Lab Environment.
- * Fiber routing and continuity checking in on-premise optical networks.

Features:

- * 2.5mm universal connector. (1.25mm adaptor optional).
- * Drilled tail-stock for use with a lanyard (not included).
- * Low battery warning.
- * Long battery life (up to 60 hours).
- * Drop-resistant and dust-proof design of laser head.
- * Laser case ground design prevents ESD damage.



GOOD CONNECTOR

CONNECTOR
WITH MICROBEND

VFL Operation:

The Visual Fault Locator (also known as a ruby-red) launches 650nm visible laser light into the fiber. When the light encounters a break or sharp bend, it scatters, and the scattered light can be observed emerging from the cable. The Visual Fault Locator can locate a break in short patchcords which an OTDR cannot detect due to their operating dead zone. In general -VFLs are not recommended for use with dark-colored or armored cables.

A VFL can also be used for checking connector quality, often a connector may appear to be serviceable, but inside the connector ferrule itself, poor gluing or the presence of impurities (i.e. dirt) may create a microbend or other light-impairment in the fiber resulting in excess insertion or return loss. As light is launched through the fiber and then emerges from a bad-connector any distortion will be visible as a series of rings superimposed on a normal output

The HA004-1 VFL can be operated in either continuous wave (CW) mode or in pulsed mode, pulsed mode aids in locating faults under high ambient light conditions and uses less power than when operating in CW mode.

Specifications:

- * Model HA004-1 VFL
- * Central wavelength: 650nm±10nm.
- * Emitter type: FP-LD.
- * Output power: 1mw.
- * Laser Range: 2-3km.
- * Optical connector: 2.5mm (std) or 1.25mm (optional).
- * Operating mode: CW or Pulse.
- * Pulse frequency: 2Hz to 3Hz.
- * Battery requirements: 2AA alkaline (not included).
- * Operating temperature: -20°C to 60°C

- * Storage temperature: -40°C to 85°C
- * Dimensions: φ26×175mm long.
- * Weight: 170g (without batteries).
- * Includes: HA004-1 VFL, Protective Sleeve, User Manual.



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