

## Visual Fault Locator SN13146

This type VFL is specially designed for field personnel who need an efficient and economical tool for fiber tracing, fiber routing and continuity checking in optical networks. It finds breakpoints, poor connections, bending or cracking in fiber optic cables; and it can find faults in an OTDR dead zone and is used for end-to-end visual fiber identification.

### Applications

- ❖ Maintenance in telecom, CATV
- ❖ Test Lab of optical fibers
- ❖ Fiber routing and continuity checking in optical networks
- ❖ Other fiber optic measurements

### Features

- ❖ 2.5mm universal connector, for 1.25mm connectors, FC(male)-LC(Female) adaptor also can be provided on request
- ❖ Operates either in CW or Pulsed mode with constant output power
- ❖ 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
- ❖ Portable and rugged
- ❖ Easy to use

### Product Description

The Visual Fault Locator 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 breaks in short patchcords, which an OTDR cannot detect due to their operating dead zone. A fault locator is also much cheaper than an OTDR. However, they are not recommended for using with dark-colored or armored cables.

The Visual Fault Locator can be operated in either continuous wave mode (CW mode) or in pulsed mode. Pulsed mode aids in locating faults under high ambient light conditions and improve battery life. It also could be used in checking connector quality. Often a connector may appears to be perfect. But inside the connector ferrule itself, poor gluing or dirty may create a microbend



in the fiber. This microbend will produce excess insertion losses or return losses, and may result in premature failure of the connector. As the visual light launches through the fiber, it emerges from the connector in question, one can readily see the distortion as a series of rings superimposed on a normal output. Bending or twisting the fiber may affect the overall intensity pattern, but not the ring pattern itself.

### Specification

Model	SN13146					
Central wavelength	650nm±10nm (635nm is available on request)					
Emitter type	FP-LD					
Output power	5mw	10mw	20mw	30mw	40mw	50mw
Laser Range	≥5km	≥10km	≥20km	≥30km	>35km	>40km
Optical connector	2.5mm universal connector, for 1.25mm connectors, FC (Male)-LC. (Female) convertor can be provided on request					
Operating model	Both CW and Pulse available					
Pulse frequency	2Hz to 3Hz / 9Hz					
Power supply	2AA alkaline batteries					
Operating temperature	-20°C to 60°C					
Storage temperature	-40°C to 85°C					
Dimension	25 x 195mm					
Weight	165g (without battery)					

### Standard Package

Model	Includes
SN13146	Main unit, User Manual, Individual packing

