



## SMART CHECKER™

### Visual Fault Locator User Manual

VFL Part Number: **AFT-G-FC** 1.25mm Adapter Part Number: **AFT-G-CAC**



SENKO ADVANCED COMPONENTS

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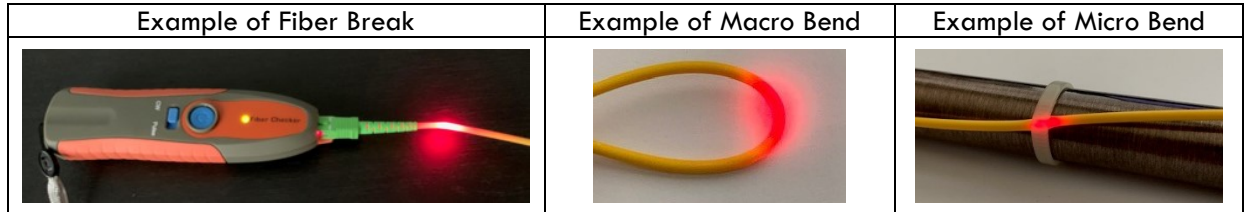
<https://www.senko.com/product/smart-checker-visual-fault-locator-vfl/>

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## 1.0 DESCRIPTION:

The **SMART CHECKER™** visual fault locator is a very useful tool designed for checking the defects of a fiber cable. It emits a visible 650 nm wavelength red laser light through fiber optic assemblies. The light can be seen where there are fiber breaks or defects like micro and macro bends in the fiber. The light will refract out creating a bright glow around the faulty area.



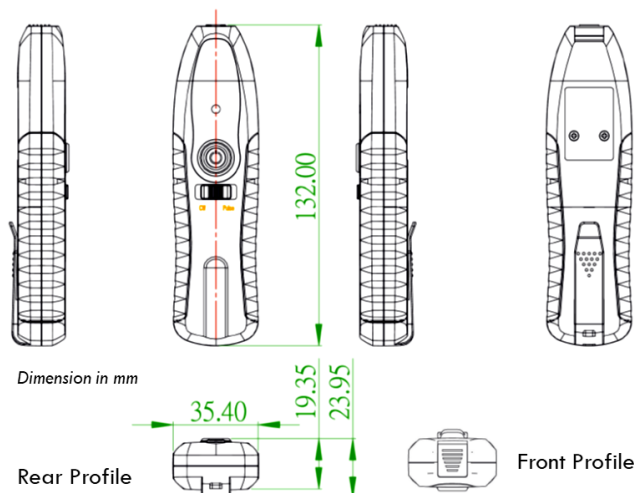
The universal 2.5mm port enables the VFL to be used on a wide range of optical connectors including SC, ST and FC connectors with UPC and APC polishes. The VFL is suitable for use on both singlemode and multimode assemblies and fibers. The 1.25 mm adapter block makes it possible to expand the range of use on 1.25 mm based connector systems including LC, SN®, CS® and MU connectors.

The VFL uses a specially designed power circuit called an Auto Power Control (APC) for giving a consistent and steady power level. The APC circuit prevents unstable laser output with low battery life. The signal output signal can be transitioned from Continuous Wave (CW) and Pulse Mode to create the desired visual effect. The VFL has a protective port cover from dust getting onto the ferrule stub in the port. The cover also serves a protective measure to avoid accidental exposure of laser beam into the operator's eyes.

## 2.0 FEATURES:

- Easy to check fiber faults by using 650 nm visual red laser
- Operates with both singlemode and multimode fibers and UPC and APC polish
- Operating in both Continuous Wave (CW) & Pulse Mode
- Range: visibility of >5 km
- Highly effective power circuits designed for stable laser power
- LED indicator for Power On, Battery Low alert
- Powered by 2 AAA alkaline batteries

## 3.0 SPECIFICATIONS:

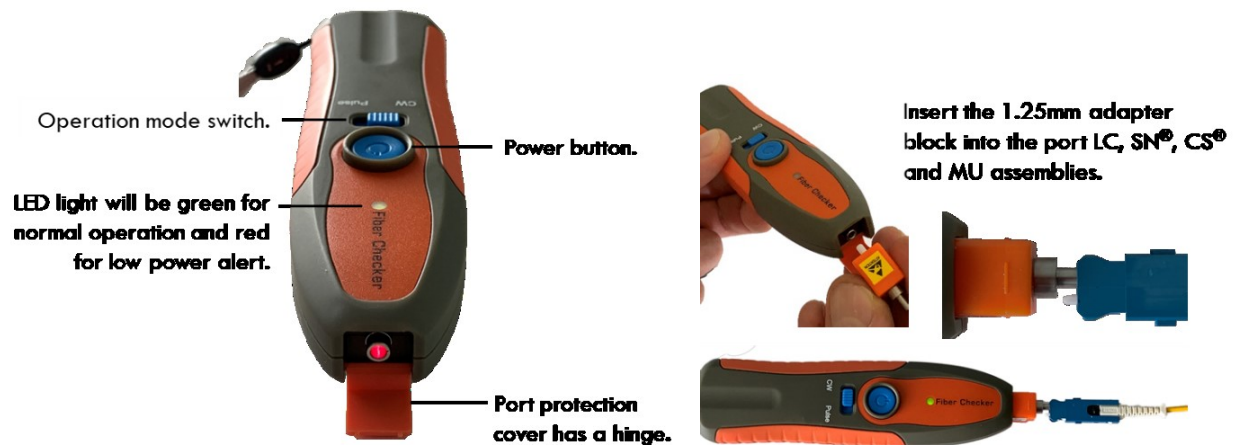


### 3.0 SPECIFICATIONS (CONT.):

<b>Laser Class:</b>	Class 2M
<b>Wavelength:</b>	650nm $\pm$ 10nm @ +25°C
<b>Spectral Width:</b>	< 10nm
<b>Output Power:</b>	> -3dBm @ +25°C into 9 $\mu$ m fiber
<b>Operational Modes:</b>	Continuous Wave (CW) Pulse Mode
<b>Power Source:</b>	2X 1.5V AAA alkaline batteries
<b>LED Indicator Modes:</b>	Green for Power On Red for Low Remaining Battery Life
<b>Emitting Range:</b>	> 5KM
<b>Operating Temperature Range:</b>	0°C to +50°C
<b>Storage Temperature Range:</b>	0°C to +70°C
<b>Weight:</b>	62g (with batteries) 40g (without batteries)

### 4.0 OPERATING INSTRUCTIONS:

1. The SMART CHECKER™ VFL is powered by two 1.5 V AAA batteries
2. Lift the protective port cover and insert the connector port opening.
3. Position the blue switch to CW for Continuous Wave or Pulse mode for the desired effect.
4. After the connector is in the port, press the blue button to power on the unit.
  - a. A GREEN LED light indicates the VFL is powered on and function properly.
  - b. A RED LED light is the alert to notify the operator of low remaining battery life.
5. Cleaning the end face before testing ensure accurate test results.
6. Avoid cross contaminating the ferrule stub in the port by not touching the connector end face and insert connectors that are clean.
7. Keep the port covered with the protective port cover when the VFL is not being used.
8. Remove the batteries from the VFL when the unit is placed in storage.



## 5.0 MAINTENANCE INSTRUCTIONS:

The SMART CHECKER™ VFL requires periodic battery changes. The VFL should not be used in areas where the unit could:

- Submersed in water and other excessive dampness.
- Exposed to extreme temperature.
- Extremely dusty environments
- Near energized power cables

The internal fiber stub will require periodic cleaning with a 1.25mm optical grade cleaning stick. Senko recommend the 2.5mm NEOCLEAN sticks (Part Number **CSK-02**).

Cleaning the ferrule end face on the 1.25mm adapter before it is inserted prevent accidental cross contaminating the ferrule stub end face in the VFL port. Senko recommends use the SMART CLEANER CASSETTE STANDARD cassette and gently wiping the end face on the cleaning ribbon.

The SMART CHECKER™ should be not be dropped onto hard surfaces. Modifying any of parts of the VFL may manage the unit and will invalidate the manufacturer's warranty.



## 6.0 PRODUCT WARRANTY:

Senko Advanced Components warrants this product to be free of defects in workmanship and materials for a period of 1 year after purchase. This warranty (excluding batteries) is solely limited to the repair and replacement of original parts, which are defective in workmanship of materials. All other costs are the sole responsibility of the owner. This warranty does not cover any defects, damage, and deterioration due to misuse, alteration, or negligence.

## 7.0 SERVICE CONTACTS:

Please contact your local Senko sales representative or email us [sales@senko.com](mailto:sales@senko.com).

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