

# KI 6610 SERIES

## HANDHELD FIBER INSPECTION MICROSCOPE



### OPTICAL COMMUNICATIONS TEST APPLICATIONS

- Optical connector end face inspection in field or factory
- Multimode and single mode fiber
- Inspects both single and dual connectors



Revision 23

The KI 6610 Handheld FiberSafe Inspection Microscope is the microscope of choice to check fiber optic connector end face quality. It provides the state of the art in eye safety.

A combination of versatile and rugged design, easy operation, quality optics and durable construction ensures that this equipment will enhance the performance of installation and maintenance staff.

#### Optical Safety:

Operators should comply with relevant company policy, standards or good practice on optical safety. This equipment greatly enhances practical eye safety in accordance with IEC60825-2 Ed 3.1 as follows:



### FEATURES

- Compact, light weight, reliable
- Excellent image quality & depth of focus
- Easy focus and image centring
- Stable LED illumination with timer
- Triple-mode illumination: coaxial, oblique & core
- Enhanced eye safety for red and infra-red light
- Long operation from AAA battery
- Micro-USB power input & low battery indication
- Tripod & lanyard mount
- View & store images on PC with optional camera
- Universal connector adaptors for most simplex and duplex connectors
- Adaptor ring for unusual connector adaptors
- x200 or x400 magnification versions
- Supplied with soft carry case
- 3 year standard warranty
- Made in Australia

The FiberSafe Microscope is used to inspect fiber optic connectors for quality and dirt, and offers improved overall performance and features.

x200 magnification is ideal for general installation & maintenance checking by entry level staff, on single mode and multimode fiber. Faults that cannot be seen are unlikely to affect connector performance, focusing is easier, and battery life is longer.

x400 magnification is ideal for high-end field use, in-house QA, factory, laboratory etc.

Ease of use and superb image quality make for simple and efficient operation. The X-Y image position is easy to optimize, and focusing is improved. Light weight, ergonomic controls and timed illumination make for easy one-hand operation, so the other hand is free to move the connector as needed.

Triple-mode illumination gives maximum flexibility. Coaxial illumination gives the highest level of image detail. Oblique

illumination shows only major defects and contaminants; Core illumination shows continuity and sub-surface cracks.

Screw-on universal adaptors suit most modern optical connectors, including duplex assemblies. An adaptor ring fits other specialist connector adaptors.

Power is either by 1 x AAA alkaline battery, with low battery indicator, or from external micro-USB. Illumination level is unaffected by battery voltage.

The unique in-built safety filter blocks both red and infra-red light. This makes the microscope eye-safe with visual fault locators up to +20 dBm and at operational wavelengths up to +30 dBm, power levels that are unlikely to be exceeded under fault conditions.

Viewing and storage of images on a computer is achieved by replacing the standard eyepiece with an optional 1.3 Mpixel digital camera.

### SPECIFICATIONS

Parameters	Value
Dimensions	184.4 mm (L) x 49.3 mm (W) / 7.3" x 1.9"
Weight	0.21 kg / 0.47 lb.
Power	1 AAA battery 300 hrs for coaxial illumination for KI 6610 75 hrs for coaxial illumination for KI 6611 External power micro-USB Low battery indicator
LED life	100,000 hours
Optical Magnification	x200 or x400 versions
Eye Safety Filter	Built-in, see eye safety specifications below
Controls	Auto-time off
Triple-mode illumination	1) Coaxial; 2) Oblique; 3) Core illumination
Microscope damage power level	+30 dBm
Operating temperature	-15 to 55°C
Storage temperature	-25 to 70°C

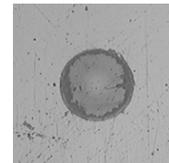
Technical data is subject to change without notice as part of our program of continuous improvements. Patents Pending.

1.3MB Digital eyepiece to capture & store images on a PC:



### TRIPLE-MODE ILLUMINATION

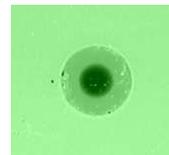
1) Coaxial illumination



The x200 Image with Coaxial illumination

Coaxial illumination maximizes the detail seen by the user. Because the light travels along the same axis as the sample inserted into the microscope, fine scratches and contamination are easily visible.

2) Oblique illumination



The x200 Image with Oblique illumination

In oblique illumination, the light from the LED hits the end-face at an angle, making the core clearly visible and allowing the user to readily see any surface debris or contamination. The amount of scratches seen on the ferrule is limited,

3) Core illumination



The x200 Image with Core illumination

Core illumination shows the details of the fiber core, or for continuity testing. It uses the in-built LED visible light source to inject the light to the patch cord, so the fiber core area can be clearly shown on the screen.

**ORDERING INFORMATION**

Description	P/N
Microscope with x200 magnification <sup>1</sup> with adaptor 2.5 mm universal	KI 6610
Microscope with x400 magnification <sup>1</sup> with adaptor 2.5 mm universal	KI 6611

Note 1: The x20 eyepiece can be easily removed and changed by the user if required.

**STANDARD ACCESSORIES**

Description	Quantity
	KI 661x
Scope adaptor 2.5 mm Universal (OPT681)	1
Instruction manual	1
AAA Battery, Wrist strap, Soft pouch	1

**OPTIONAL ACCESSORIES**

Description	P/N
Option, USB A-to-micro B cable	OPT188B
Option, digital eyepiece, 1.3 MB	OPT684

**OPTIONAL INTERCHANGEABLE CONNECTOR ADAPTORS**

Description	P/N
Option, Scope adaptor kit Include: OPT681A, OPT682, OPT682A & OPT683	OPT680
Option, Scope adaptor 2.5 mm Universal	OPT681
Option, Scope adaptor 2.5 mm Universal, APC	OPT681A
Option, Scope adaptor 1.25mm Universal	OPT682
Option, Scope adaptor 1.25 mm Universal, APC	OPT682A
Option, Scope adaptor converter to 7/8 UN-28 TPI, female	OPT683
Option, Scope adaptor MPO/MTP, x200 scope only	OPT677
Option, scope adaptor MPO/MTP APC, x200 scope only	OPT678

Please enquire for other adaptor styles.

OPT683 fits various common male scope adaptors with a 7/8 UN-28 TPI thread, eg JDSU/ Westover FMA Series, Lumen etc.

AUTHORISED DEALER

