DIAMOND
Fiber Optic Equipment

INSPECTION EQUIPMENT

DESCRIPTION

Contamination is the first reason for troubleshooting optical networks. Proactive inspection and cleaning of fiber connectors can prevent poor signal performance, damage to equipment, and network downtime. DIAMOND's Video Microscope Kit contains all necessary tools for proper inspection and cleaning of the connector's front-faces to help ensure optimal connector performance. The Video Microscope meets today's requirements for safety, reliability and quality, and is the first handlheld easy-to-use field inspection tool and optical power measurement (OPM) into one solution.

The microscope also saves test results and generate certification reports as document work quality, this will optimize the technicians efficiency so that they can complete a right job already at the first time.

The Microscope offers an high resolution 3.5 inch color LCD video display, integrated end-face illumination for inspection of 2.5 mm or 1.25 mm (PC and APC) ferrules, for both, unmated connector, and in-adapter connectors with the inspection probe.

The inspection probe can also be used as stand-alone device and be directly connected via USB to laptops or PCs, without the need for an external power supply.

Video Microscope with inspection probe

FEATURES AND BENEFITS

▶ Integrates fiber inspection and optical power measurement (OPM) into one solution.
- OPM with multiple calibrated wavelengths from 780 to 1625 nm.
- Generates certification reports to prove that work quality meets industry standards and customers specifications
▶ User can easily manage specific pass/fail acceptance criteria with dedicated profiles for each requirement.
▶ Onboard storage results. (up to 10'000 measurements).
▶ Connectable to a PC via mini-USB, to export data and manage acceptance criteria using FiberChekPRO software.
▶ Automatic fiber-image centering.
▶ Two USB ports to connect additional devices such as the inspection probe.
▶ Intuitive Smartphone-style user interface with touch screen.
▶ Rugged, weather-proof design.
▶ Inspection probe with:
- *FiberChekPRO™ software for analysis and reporting with laptops/PCs*
- *Dual magnification (200X and 400X)*
- *Adapters for checking unmated connectors as well as in-adapter connectors*
- *Automatic image centering ensures the fiber always appears in the center of the screen*
- *Magnification toggle button allows easy switching in both live and analysis views*

1) P/N 1081582

AVAILABLE KITS

1) Complete inspection set, cleaning kit, inspection probe, hard case including universal adapter 1.25mm and 2.5mm for free PC connectors, and SC, LC (PC) adapter tips for in-adapter inspection.
2) Inspection probe including SC, LC (PC) tips for in-adapter inspection, universal 1.25mm + 2.5mm (PC) for free connector and soft padded pouch.

2) P/N 1074601

DIAMOND
the fiber meeting

Specifications subject to change without notice

BDD 1950573 *05_18*

Inspection probe P5000i/Laptop application

OPTIONS

- Visual fault locator, including reduction adapter 2.5mm → 1.25mm
- Specific adapters for free connectors (E-2000™, F-3000™ simplex and duplex, F-SMA)
- Specific adapter-tips for in-mating adapter inspection (E-2000™, F-3000™, FC, SC, ST™, Mini-AVIM, other upon request)
- Ferrule cleaner for in-adapter cleaning (1.25mm, 2.5mm, DiaFlex/MPO)

GENERAL TECHNICAL (TYPICAL AT 25°C)	
Weight	1.2 lb (1.4 lb for PCM version)
DIMENSIONS (H X W X D)	
OLP-82P	20.83 x 152.4 x 6.35 (8.2 x 60 x 2.5 in)
Video display	3.5 in color LCD, 4:3 ratio
Keypad	11+2 dome-buttons membrane panels 4 LED indicators
Connector	USB 2.0 (2 x host, Type A; 1 x device, Micro-B)
Power source	AC adaptor, battery (Alkaline or rechargeable Li ion), USB port
RUN TIME	
Rechargeable Li ion= (minimum)	8 hours
Alkaline	5 hours
Power mode	Active, Auto-off
Auto-shutoff time	User programmable
CHARGE TIME	
AC adaptor	8 hours
USB port	16 hours
Power source	USB port
Certification	CE, IEC/EN61326
INSPECTION PROBE	
Dimensions and weight	140 x 46 x 44 mm (5.5 x 1.8 1.7in); 110 g (3.88oz)
Field of view	740 μm x 550 μm @ 200x; 370 μm x 275 μm @ 400x
Cord length	183 cm (6 ft)

OPTICAL POWER METER	
Interface	Free space (2.5 mm UPP adapter, 1.25 mm UPP optional)
POWER MEASUREMENT RANGE	
1300/1310 nm	
Standard	–50 to +10 dBm
High power	–40 to +23 dBm
850 nm	
Standard	–45 to +10 dBm
High Power	–35 to +23 dBm
DISPLAY RANGE	
Standard	–65 to +10 dBm
High power	–50 to +23 dBm
MAXIMUM PERMITTED INPUT LEVEL	
Standard	+10 dBm
High power	+23 dBm
Standard wavelength settings	850, 980, 1300, 1310, 1490, 1550, 1625 nm
Intrinsic uncertainty[1]	±0.20 dB (±5%)
Linearity[2]	±0.06 dB (–50 to +5 dBm)
Wavelength range	780 to 1650 nm

1 Under the following reference conditions: –20 dBm (CW), 1300 nm ± 1 nm, 23°C ± 3K, 45 to 75% rel. humidity, 9 to 50 μm fiber.
2 5 to +45°C

Complete kit with case: 400 x 320 x 200 mm; (15.7 x 12.6 x 7.8 inches), 4.5 kg (10 lbs)

ORDER INFORMATION

Please refer to the part numbers provided in the separate P/N list.
For other configurations, please contact your nearest local Diamond representative or fill in the contact form available on the **www.diamond-fo.com** website.