

KI 23400/KI 27400 Series

HANDHELD 2-WAY +LENGTH +ORL FIBER CERTIFIER

Test Applications

- SM, MM & both fiber types
- Tier 1 cable certification & reporting
- Bidirectional loss, length & ORL in one hook-up with integrated VFL (VisiTester)
- Optical power, continuity & polarity



Revision 19

The KI 2x400 series is a fast, accurate and easy bi-directional Tier 1 certifier for multimode and single mode fiber.

2-Way loss, length & ORL pass/fail are displayed in real time on both instruments, at multiple λ , for one test hook-up per fiber*.

The compact instrument is also a stand-alone light source, optical power meter and VFL.

The VisiTester feature mixes a VFL laser with the test signal, making a connected test fiber obvious at the other end.

Excel-based reporting software provides tamper-proof and Standards-based certification and reporting, ensuring a combination of flexibility, productivity, and confidence. Datalogging, download and a real time mimic display are also included.

Features

- Ease to use, slim & versatile
- Loss, length & ORL tester for high fiber counts*
- Real time pass / fail
- Sunlight readable & backlit LCD
- SM, MM (EF Compliant) & quad test options
- Large memory & USB key file dump
- Interchangeable connectors
- Real-time, secure PC reporting software
- Continuity test tone with multi-Fiber ID
- VFL VisiTester option
- Long battery life, USB external power
- >25 calibration λ , 1% accuracy
- ISO 17025 traceable calibration
- 3-year warranty
- 3-year recommended calibration cycle
- Made in Australia

* Length, ORL and VisiTester on selected instrument models

KI 23400/KI 27400 Series - Handheld 2-way +ORL +Length Fiber Certifier

A pair of fully featured KI 23400/ KI27400 Loss Test Sets easily tests and reports fiber optic loss, length and ORL pass / fail against standards. Backed up by ILAC/ ISO 17025 traceable calibration, it is ideal for test applications requiring accuracy with high throughput.

The real-time and comprehensive test display helps the user ensure there is a good optical connection before storing a reading. This ensures superior practical accuracy and makes fault finding easier and quicker.

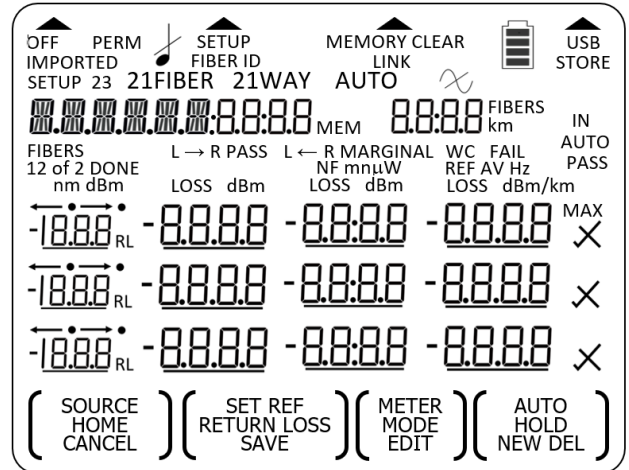
Two identical instruments are used, one of them automatically takes over as the master, and the same information is displayed each end, which simplifies practical operation. The test procedure is the same for all fiber types.

The instruments provide flexible ways of working and, can be used with or without an on-site computer. They are compact, lightweight and have >80 hours battery life.

Associated KITS™ software is tightly integrated and provides an easy workflow to set up, test and report against international standards or specific customer requirements, in a tamper-proof yet flexible reporting environment.

Test results can be stored in the 10,000 fibers memory, along with a text-input cable name and timestamp, and then dumped directly onto a USB memory key, providing limitless, secure, and future-

proof data handling. These secure files or instrument memory can then be downloaded into KITS™. Alternatively, if a computer is available on-site, live readings can be clicked directly onto a customer report using our proven KITS™ customizable Excel-based reporting software. Pass / Fail standards can be selected as: international, in-house, or ad hoc, so the user can enter updated standards as appropriate.



TWO WAY AUTOTEST SPECIFICATIONS

Using a pair of instruments, bi-directional test is achieved in real time over a single fiber with one hook-up, giving greatly superior speed, accuracy and ease of use compared to conventional two-step, two-fiber instruments. This saves training, skill, time, cleaning and materials, while also improving test confidence.

All 3 loss, length & ORL measurements are seamlessly integrated into the real time display. Loss referencing can be performed

locally or remotely.

VisiTester illuminates the test fiber, making the other end easy to find, particularly when cable or fiber labelling is mis-matched or missing.

A handy two-way Autotest communications feature helps both users step quickly through a large fiber array.

| Fiber Type | Wavelengths | Loss | | Length | | |
|------------|-----------------------------------|---------|---------------------------|----------------|-----------------------|---|
| | | Range | Repeatability / Linearity | Range | Accuracy ¹ | Resolution |
| MM | 850, 1300 nm (62.5 μm) | 27 dB | 0.06 dB | 6.0 dB / 20 Km | 0.01 % ± 4 m | 1 m (0.000~9.999 Km) 10 m (10.00~99.99 Km) 100 m (100.0~127.9 Km) |
| | 850, 1300 nm (50 μm) | 24.5 dB | | 4.0 dB / 20 Km | | |
| MM | 850, 1300 nm VisiTester (62.5 μm) | 24 dB | 0.06 dB | 4.5 dB / 20 Km | | |
| | 850, 1300 nm VisiTester (50 μm) | 21.5 dB | | 4.5 dB / 20 Km | | |
| SM | 1310, 1550 (VFL) nm | 47 dB | 0.04 dB | 30 dB / 128 Km | | |
| SM | 1310, 1490, 1550, (VFL) nm | 44 dB | 0.04 dB | 27 dB / 128 Km | | |
| | 1310, 1550, 1625 (VFL) nm | | | | | |
| SM | 1310, 1550 nm, VisiTester | 44 dB | 0.04 dB | 27 dB / 128 Km | | |
| SM | 1310, 1490, 1550, nm, VisiTester | 41 dB | 0.04 dB | 24 dB / 128 Km | | |
| | 1310, 1550, 1625 nm, VisiTester | | | | | |
| SM | 1310, 1490, 1550, 1625 (VFL) nm | 41 dB | 0.04 dB | 24 dB / 128 Km | | |

For detailed source & ORL specifications, refer Light Source and ORL specifications

Note 1: Up to 3 dB above optical measuring loss limit. Cable ORL variation and fiber/cable length mismatch are typically dominant



ONE WAY AUTOTEST SPECIFICATIONS

Using a single instrument, the light source and power meter can be looped around in one-way Autotest mode, to measure loss only.

The 2-way test ports also operate as one-way Autotest light sources, compatible with other Kingfisher Autotest power meters, or as basic light sources.

The power meter is also compatible with other Kingfisher Autotest sources with matching wavelengths.

One-way Autotest provides fast & easy loss testing at up to 3 λ , in one direction, along with the source nominal power level and λ , with either local or remote referencing.

| Fiber Type | Wavelengths | Loss Range | Loss Repeatability / Linearity |
|------------|---|------------|--------------------------------|
| MM | 850, 1300 nm (62.5 μ m) | 27 dB | 0.06 dB |
| | 850, 1300 nm (50 μ m) | 24.5 dB | |
| MM | 850, 1300 nm, VisiTester (62.5 μ m) | 24 dB | 0.06 dB |
| | 850, 1300 nm, VisiTester (50 μ m) | 21.5 dB | |
| SM | 1310, 1550 nm | 47 dB | 0.04 dB |
| SM | 1310, 1490, 1550, nm | 44 dB | 0.04 dB |
| | 1310, 1550, 1625 nm | | |
| SM | 1310, 1550 nm, VisiTester | 44 dB | 0.04 dB |
| SM | 1310, 1490, 1550, nm, VisiTester | 41 dB | 0.04 dB |
| | 1310, 1550, 1625 nm, VisiTester | | |
| SM | 1310, 1490, 1550, 1625 (VFL) nm | 41 dB | 0.04 dB |

OPTICAL POWER METER SPECIFICATIONS

The power meter port uses the same interchangeable connector adaptors as the other ports.

ISO17025 Traceable calibration at many wavelengths at 1% accuracy, and full linearity test, is the best in the industry.

The tight Total Uncertainty specification covers the full range of power levels, ambient temperatures, connectors, and fibers, without user dark current offset.

The multi-Fiber ID feature tests common test tones and, can also positively identify 1 of 12 test tones from multiple test sources. This can speed up continuity / polarity testing.

Please enquire for non-standard power meter configurations such as high-power detectors up to +33 dBm, POF / MPO. MTP / MXC applications, special connectors, wavelength selective detectors, special calibrations etc.

| Response λ Nm | Damage level dBm | Calibration λ nm | Power range dBm | Tone & Autotest Min dBm | Midrange linearity ² dB | Calibration Accuracy ³ % | Polarization Sensitivity ⁶ dB | Total Uncertainty dB ^{4,5} | λ Sensitivity ± 30 nm ⁵ dB |
|--------------------------|---------------------|---|------------------------|----------------------------|---------------------------------------|--|---|--|---|
| InGaAs detector | | | | | | | | | |
| 600 ~ 1700 | +15 | 780, 820, 850, 980 1270, 1290, 1300, 1310, 1330, 1350, 1370, 1390, 1410, 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590, 1610, 1625, 1650 | +10 ~ -60 +10 ~ -70 | -45 -50 | 0.04 | 1 % (0.06 dB) | < 0.05 | 0.3 | 0.2 |
| Typical | | | | | | | Typical | max | typical |

Note 2: Mid-range linearity excludes top 5 dB and bottom 10 dB of range.

Note 3: Calibration condition: non coherent light, -35 \pm 5 dBm, 23 \pm 1 $^{\circ}$ C, \pm 1 nm, 10 \pm 3 nm FWHM, PC ceramic connector, 100 μ m fiber.

Note 4: Includes contributions of: varying optical connector types, calibration uncertainty, linearity over temperature & range, and fiber core diameter up to 200 μ m.

Note 5: At calibration wavelengths in bold type.

Note 6: For APC connector only.

LIGHT SOURCE SPECIFICATIONS

The emitters feature excellent repeatability and stability. Re-connection repeatability is < 0.1 dB, which contributes to exceptional test confidence.

LED sources are Encircled Flux (EF) compliant, to provide the most consistent and reliable testing results.

The Zero Warm Up (Ultra Stable) source option uses a unique optical design, to provide zero warm up, ultra-high temperature stability, and is unaffected by varying back reflection. It provides unmatched test stability in arduous conditions.

The multi-Fiber ID feature tests common test tones and, can also

positively identify 1 of 12 test tones from multiple test sources. This can speed up continuity / polarity testing.

Please enquire for non-standard source configurations such as other wavelengths, power levels, connectors etc.

Up to 2 test ports with 6 assorted LED or laser emitters can be custom specified per instrument, making this a versatile tester for mixed multimode / single mode fiber testing.

Laser options can be compliant with CWDM standards to cover typical cable qualification for O, E, S, C, & L bands, including the water absorption peak, 1625 and 1650 nm.

| | 1310 / 1550 nm F-P Laser | 1490 / 1625 nm CWDM ⁷ Laser | 650 nm VisiTester | 850 / 1300 nm LED | Comments |
|--|--|---|----------------------|----------------------|---|
| Power accuracy | ± 1 dB (LED @ 62.5 μm) | | | | Refer to ORDERING INFORMATION for specific model's nominal power level. |
| Short term stability (dB) KI27400 ⁸ / KI23400 ⁹ | 0.04 / 0.03 | 0.06 / 0.04 | NA | 0.01 | |
| Stability over temp (dB) KI27400 / KI23400 | 0.6 / 0.2 | 0.6 / 0.2 | NA | 0.35 | Typical / Max |
| λ initial tolerance (nm) | 20 | 6.5 | 5 | NA | At 25 °C |
| λ width, nm | 3 | < 1 | 3 | NA | FWHM, typical |
| λ nm/°C | 0.4 | 0.1 | 0.1 | 0.4 | Typical |
| Mode Controlled Source | NA | NA | NA | Mode controlled | 50/125 compliant: IEC 61280-4-1 (Ed.1.0), TIA/EIA 526-14A & TIA TSB-178. |
| Reconnection repeatability (dB) | 0.1 | 0.1 | 0.1 | 0.05 | 95 % confidence |
| Laser output power | Adjustable over 7 dB in 0.01 dB steps | | | NA | |
| Modulation | 270 Hz, 1 kHz, 2 kHz ± 2 %, 12 multi-Fiber ID tones, 2 Hz blink for VisiTester | | | | |

Note 7: CWDM laser wavelengths: 1270, 1290, (1310), 1330, 1350, 1370, 1390, 1410, 1430, 1450, 1470, 1490, 1510, 1530, (1550), 1570, 1590, 1610 nm

Note 8: For 15 min, typ. ± Δ 2°C, after warmup, ORL < -25 dB

Note 9: For 15 min, max, ± Δ 3°C

VisiTester or VFL SPECIFICATIONS

On "V" part numbers the unique VisiTester mixes a powerful red laser with Two-Way Autotest, so at the far end, the active test fiber winks, making the fiber to be tested obvious to the user. The red laser is mixed with a test tone for a clip-on fiber identifier. This mixed signal extends practical fault-finding options since a clip-on fiber identifier can be used simultaneously. The red laser can

also be selected in stand-alone mode, for typical fault-finding applications.

On "F" part numbers the VFL on a separate optical port offers a stand-alone fault and continuity finder.

| Parameters | Values |
|-------------------------------|--------------------------------|
| Wavelength | 650 ± 5 nm |
| Power | 0 dBm ± 1 dB (@ SM / MM fiber) |
| Laser Safety | Class 1, IEC60825-2 |
| Blink rate (Stand-alone mode) | CW or 2 Hz |

ORL SPECIFICATIONS

The full-featured ORL meter can operate in stand-alone mode or integrated with Autotest.

In two-way Autotest, the ORL is measured at each end of the link, and the results displayed on both instruments.

A Zero-function compensates for residual reflections, and to

provide extended measurement range with improved linearity. A User-Calibration Mode compensates for losses in a test set-up, which improves overall accuracy.

Multimode ORL ports all have APC connectors to ensure the full ORL measuring range.

| Parameters | Laser | | LED |
|---|---|--|--|
| | 1 or 2 λ | 3 or 4 λ | |
| Range ¹⁰ | 0 ~ >60 dB | 0 ~ >57 dB | 0 ~ >30 dB (62.5 μ m) 0 ~ >27.5 dB (50 μ m) |
| Port isolation / residual ¹⁰ | >60 dB | | > 25 dB |
| ORL linearity ¹⁰ | 0.1 dB 55 ~ 60 dB: 1 dB after zero offset | 0.1 dB 52 ~ 57 dB: 1 dB after zero offset | 0.1 dB 22.5 ~ 30 dB: 1 dB after zero offset |
| ORL calibration accuracy ¹¹ | 0.2 dB | | 0.2 dB |
| Resolution | 0 ~ 50 dB: 0.01 dB 50 ~ 65 dB: 0.1 dB | 0 ~ 45 dB: 0.01 dB 45 ~ 60 dB: 0.1 dB | 0 ~ 30 dB: 0.01 dB 30 ~ 45 dB: 0.1 dB |
| λ available | See source options in LIGHT SOURCE SPECIFICATIONS | | |

Note 10: Instruments with PC connectors will have reduced ORL range due to ORL limitations of the PC connector, typically around 50 dB. We suggest an APC instrument connector is always preferable unless low-range ORL measurements are acceptable

Note 11: Under calibration conditions: ORL of approximately 14.5 dB, 25 °C

GENERAL SPECIFICATIONS

The practical interchangeable optical connectors are dust & drop protected and are very simple to swap over or clean. SC adaptors are supplied, with others available including small form factor LC and universal styles. The metal-free adaptors avoid damaging contamination of connectors in high power systems.

The instrument has excellent battery life. Flexible instrument power options include alkaline or rechargeable batteries, with a jumper selectable on-board battery charger. External power is via micro-USB. The custom LCD is clearly sunlight readable, operates

over a wide temperature range, and has a reliable LED backlight.

Memory operation is simple, with 10,000 fiber capacity, and the memory can be easily dumped directly onto a USB key, providing effectively infinite capacity. Auto-incrementing identification text is stored with each test result and, can meet standard-based labelling schemes. The user can go back and re-test a fiber.

Firmware & software updates (with standards and other updates) are free.

| Parameters | Value | Parameters | Value |
|--------------|--|-------------------------------|--|
| Battery life | Laser/LED source: 50 hours in Autotest, typical Power meter: 100 hours, typical | Operating/Storage | -15 to 55 °C / -25 to 70 °C |
| Size | 190 x 105 x 35 mm (7.5 x 4.1 x 1.4") | Relative humidity | 0 ~ 95 % |
| Weight | 420 gm (0.9 lb.) / Shipping 1.5 Kg (3.3 lb.) | Tone detection | 150 ~ 9900 Hz \pm 1 % |
| LCD size | 74 x 55 mm / 2.9 x 2.2" | Recommended calibration cycle | 3 years |
| Case | Polycarbonate / rubber edges & corners, moisture resistant, 1-meter drop tested | Power | 2 Alkaline AA cells or 2 x NiMH AA cells, user selectable charging; Ext power input via micro-USB; Selectable auto-off, low battery indicator, backlit display |
| Dust cap | Captive, functions as tilt bail when open | | |
| Memory | Test results & timestamp for 8,000 fibers, unlimited on USB memory key | | |

Australian and international patents. Technical data is subject to change without notice as part of our program of continuous improvements. Class 1 Laser / LED infra-red device compliant with IEC60825-2.



ORDERING INFORMATION

| Description | Source Power (dBm) @ Fiber Type (µm) | | | | | Ports | P/N |
|---|--------------------------------------|-----|-------|-----|------------------|-------|---------------------------|
| | Laser | LED | | | VisiTester / VFL | | |
| | | SMF | SMF | 50 | | | |
| Refer to LIGHT SOURCE SPECIFICATIONS for Power Accuracy specifications | | | | | | | |
| KI27400 series: Loss Testing | | | | | | | |
| Instrument, LTS-2W 1310-1550-1625 nm Laser APC, InGaAs | -7 | - | - | - | - | 2 | KI27410-InGaAs-APC |
| Instrument, LTS-2W 850-1300 nm LED, 1310-1550 nm Laser, InGaAs | -3 | -35 | -25.5 | -23 | - | 3 | KI27424-InGaAs |
| Instrument, LTS-2W 850-1300 nm LED, 1310-1550 nm Laser APC, InGaAs | -3 | -35 | -25.5 | -23 | - | 3 | KI27424-InGaAs-APC |
| KI27400 series: Loss Testing, Length, VisiTester (depends on model) | | | | | | | |
| Instrument, LTS-2W Length VisiTester, 850-1300 nm LED, InGaAs | - | -39 | -29.5 | -27 | 0 | 2 | KI27403LV-InGaAs |
| Instrument, LTS-2W Length VisiTester, 1310-1550 nm Laser, InGaAs | -7 | - | - | - | 0 | 2 | KI27422LV-InGaAs |
| Instrument, LTS-2W Length VisiTester, 1310-1550 nm Laser APC, InGaAs, | -7 | - | - | - | 0 | 2 | KI27422LV-InGaAs-APC |
| Instrument, LTS-2W Length VisiTester, 1310-1550-1625 nm Laser APC, InGaAs | -10 | - | - | - | 0 | 2 | KI27410LV-InGaAs-APC |
| Instrument, LTS-2W Length VisiTester, 1310-1490-1550-1625 nm Laser APC, InGaAs | -7 | - | - | - | 0 | 2 | KI27416LV-InGaAs-APC |
| Instrument, LTS-2W Length VisiTester, 850-1300 nm LED, 1310-1550 nm Laser, InGaAs | -7 | -39 | -29.5 | -27 | 0 | 3 | KI27424LV-InGaAs |
| Instrument, LTS-2W Length VisiTester, 850-1300 nm LED, 1310-1550 nm Laser APC, InGaAs | -7 | -39 | -29.5 | -27 | 0 | 3 | KI27424LV-InGaAs-APC |
| Instrument, LTS-2W Length VisiTester, 850-1300 nm LED, 1310-1490-1550-1625 nm Laser APC, InGaAs | -7 | -35 | -25.5 | -23 | - | 3 | KI27425LV-InGaAs-APC |
| KI23400 series: Loss, Length, ORL, VisiTester or VFL (depends on model), Ultra Stable (U/S, depends on model) | | | | | | | |
| Instrument, LTS-2W ORL Length VisiTester, 850-1300 nm LED APC, InGaAs | - | -39 | -29.5 | -27 | 0 | 2 | KI23403OLV-InGaAs-APC |
| Instrument, LTS-2W ORL Length VisiTester, 850-1300 nm LED APC, 50 µm, Ge | - | -39 | -29.5 | -27 | 0 | 2 | KI23403OLV-InGaAs-APC-50U |
| Instrument, LTS-2W ORL Length VisiTester, 1310-1550 nm U/S Laser, InGaAs | -7 | - | - | - | 0 | 2 | KI23422OLV-InGaAs |
| Instrument, LTS-2W ORL Length VFL, 1310-1550 nm U/S Laser APC, InGaAs | -3 | - | - | - | 0 | 3 | KI23422OLF-InGaAs-APC |
| Instrument, LTS-2W ORL Length VFL, 1310-1490-1550 nm U/S Laser APC, InGaAs | -7 | - | - | - | 0 | 3 | KI23427OLF-InGaAs-APC |
| Instrument, LTS-2W ORL Length VFL, 1310-1550-1625 nm U/S Laser APC, InGaAs | -7 | - | - | - | 0 | 3 | KI23410OLF-InGaAs-APC |
| Instrument, LTS-2W ORL Length VFL, 1310-1490-1550-1625 nm U/S Laser APC, InGaAs | -7 | - | - | - | 0 | 3 | KI23416OLF-InGaAs-APC |
| Instrument, LTS-2W ORL Length, 850-1300 nm LED APC, 1310-1550 nm U/S Laser APC, InGaAs | -3 | -38 | -25.5 | -23 | - | 3 | KI23424OL-InGaAs-APC |

Please enquire for instrument with other combinations of wavelength, power levels, PC/APC connectors and measurement capabilities.

STANDARD ACCESSORIES

| Description | Quantity |
|--|------------|
| SC/SC (OPT046) Hybrid adaptors | 1 per port |
| SC/LC (OPT076) Hybrid adaptors | 1 per port |
| SC/ST (OPT040) Hybrid adaptors | 1 per port |
| SC PC Terminator (OPT703) <i>[only for KI23400 series]</i> | 1 |
| SC APC Terminator (OPT704) <i>[only for KI23400 series]</i> | 1 |
| SC-SCAPC SMF Test Lead (OPT730-SCP-SCA) <i>[only for KI23400 series with Laser sources]</i> | 1 |
| SC-SCAPC MMF Test Lead (OPT706) <i>[only for KI23400 series with LED sources]</i> | 1 |
| SC-SC(APC) MMF Test Lead (OPT740-SCP-SCA) <i>[only for KI23400 series with LED sources @ 50 µm]</i> | 1 |
| 50 & 62.5 µm fiber mandrel wrap set for Multimode sources (OPT701) <i>[only for KI23400 & KI27400 series with LED sources]</i> | 1 set |
| USB cable (A-B type) | 1 |
| Carry Pouch | 1 |
| Wrist Strap | 1 |
| Operation manual | 1 |
| QA certificates | 1 set |
| ILAC/ NATA traceable calibration certificates including Power Meter, Light Source, Two-way detector | 1 set |

OPTIONAL INTERCHANGEABLE CONNECTOR ADAPTORS

This instrument is supplied with metal-free sleeve optical interchangeable connector adaptors. The source ferrule type is fixed, and customer specified as either PC or APC. The power meter is for both PC & APC. Green is associated with APC. You

can order any number of connector adaptors. Order quantity one per port. Universal adaptors are recommended to be used only on power meter ports.

| Description | P/N | Description | P/N |
|----------------|--------|---------------------|---------|
| FC | OPT051 | E2000/LSH, Green | OPT060G |
| ST | OPT040 | E2000/LSH | OPT060 |
| LC | OPT076 | 1.25mm universal | OPT085 |
| SC | OPT046 | POF Multi-Connector | OPT077 |
| MU | OPT080 | 2.5mm universal | OPT081 |
| HFBR | OPT078 | F3000 | OPT072 |
| LSA / DIN47256 | OPT071 | SMA | OPT082 |



OPTIONAL ACCESSORIES

| Description | P/N |
|--|---------|
| Option, Carry Case for 2 Instruments | OPT153 |
| Option, Carry Case includes Cletop-style cleaner & Cleaning Sticks | OPT154B |

AUTHORIZED DEALER

KI 2000 Series LS / LTS / 2-way LTS / PM General Features



Revision: 5

Full Feature Family

Full featured handheld optical Power Meter (purple), Light Source (yellow), Loss Test Set (red).

Calibrations of all instruments are ISO 17025 traceable.

All Systems

Models for all fiber optic systems inclusive of Telco, PON, LAN, WAN, MPO/MTP Ribbon fiber, PO.F. A meter can test many fiber & connector types.

Ease of Use

Fewer key-strokes with custom LCD and 3 λ loss test display, Autotest & guided button usage.

VisiTester Option

Mixes a laser VFL with Autotest Light Source, so the active test fiber winks, making it obvious.



Long Battery Life

Just 2x AA batteries work for 1000 hours for Power Meter, 90 hours for Light Source & Loss Test Set. Choice of batteries is available with a jumper selectable battery charger.



Total Uncertainty Specification

The Power Meter's unique Total Uncertainty Specification covers accuracy over all power levels, temperatures, connector and fiber types.

USB Key Data

Results in internal memory can be copied onto a USB memory key with one button push, providing unlimited test data storage capacity, backup or send from a cell phone.



Class 1 Laser

Kingfisher Laser Light Sources are Class 1 as per international laser eye safety standard, IEC 60825-2 (2011).

Autotest

Provides automatic real time multi λ loss testing up to 6 λ , with up to 3 λ displayed at once, with the respective source power levels. Use any Autotest source / meter / LTS with matching λ . One key-stroke to set all references or store all reading.

Encircled Flux Compliant Multimode Light Sources

All LED sources are Encircled Flux (EF) standards compliant, to provide the most consistent and reliable testing results.

Large LCD Display

The large custom LCD screen, is sunlight readable & backlit. It displays loss test data for 3 λ including reference or source power levels in Autotest.

Ribbon Fiber Test

The large detector area XL-version Power Meter is ideal for testing MPO/MT/MTP ribbon fiber connectors up to 72 fibers, 1 mm POF, fiber bundles, or any fiber with an active area up to 3 mm across.



USB Power & Charging

Instruments can be powered or charged (if rechargeable batteries are fitted) via micro-USB.

Text Naming for Test Data

Loss test results can be stored in the large memory, along with a user-input cable name. Capacity is 1000 4- λ tests with text, timestamp, reference levels etc.



Test Tone with Multi-Fiber ID Function

Multi-Fiber ID Sources and meters provide a tone feature which can uniquely identify up to 12 fibers, in addition to common test tones, perfect for high density polarity and continuity testing.

Captive Dust Cap

The flip-over captive dust cap functions as tilt bail when open.



Other Features

- Useful standard accessories include pouch & wrist strap, connectors & documentation.
- Selectable auto-off & low battery indicator
- Versatile, rugged, reliable, moisture resistant constructions
- Power averaging mode for modulated signal
- Max / Min recording & display hold
- Displays mW, μ W, nW, dB, dBm to 0.01 dB resolution
- Zero-warm up time Light Source option
- Up to 6 mixed LED, Laser & VFL Light Sources
- Up to 25 genuine Power Meters calibration wavelengths
- 3 ~ 7 Year warranty
- 2-way LTS capable of ORL & Length measurements
- 2-way LTS with large memory for 10,000 fibers
- ILAC/ ISO 17025 traceable calibration certificate

Interchangeable Connector

The practical interchangeable optical connectors are dust & drop protected and very simple to swap over or clean. Refer to Kingfisher's websites below for details;

[For standard instrument](#)

[For XL Power Meter](#)



Most Kingfisher adaptors are metal free to avoid contamination of connectors in high power systems.