

Acterna optical test kits

Pocket-sized Optical OMK-5, OMK-6, OMK-7 High performance OMK-14C, OMK-15C, OMK-18C

All the Acterna OMK optical test kits include one power meter and one light source as standard. This combination is ideal for power and loss management. The OMK-15C has in addition, a variable optical attenuator. Each kit is packaged in its own robust field carrying case complete with all necessary adapters, cables and accessories.

OMK-5, OMK-6 and OMK-7 are handy, pocket-sized instruments optimized for absolute power and loss measurements.

OMK-14C, OMK-15C and OMK-18C are compact high performance instruments for rapid verification, installation, maintenance and repair in fiber optic networks.

Simple, pocket-sized measurement

Three-button operation and a bright, clear display make the pocket-sized OMK-5, OMK-6 and OMK-7 very easy to use. The reference level for the attenuation measurement is made to IEC-874-1 (method 6) and can be saved with a single keystroke.

The possibility of measurement errors is eliminated because the power meter automatically detects the wavelength being transmitted by the light source. As a result, dual wavelength measurements can be made quickly and easily, using the saved reference levels.

Features

- Dedicated solutions for all applications in verification, installation, maintenance and surveillance of fiber optic networks
- Easy report generation with Fiber ASSISTANT software and high performance test kits
- Simple reliable operation
- Rugged, compact and lightweight
- 3 year re-calibration period



High performance measurement

High performance OMK-14C, OMK-15C and OMK-18C feature a wide dynamic range making them suitable for use in many different applications. The OMK-18C is dedicated to high power applications such as CATV systems, optical amplifiers and high power lasers.

OMK-15C includes a variable optical attenuator for bit error rate tests, determination of system margin and receiver sensitivity while verifying or installing a fiber optic network.

Precision calibration to traceable national standards ensures high accuracy measurement in user selectable units for the high performance power meters.

Two unique Universal Push Pull (UPP) adapters provide reliable, reproducible connection to all common 1.25 and 2.5 mm connectors, ensuring that the user always has the correct connection in the field.

Absolute power level can be stored with a single keystroke, making it easy to take relative measurement loss tests.

The AutoWavelength detection function detects the actual wavelength being used and switches automatically to the appropriate wavelength range. TwinTest performs two wavelength loss measurements automatically.

High performance OLPs can store up to 1000 sets of test measurements. Data can be downloaded to a printer for hard copy records, or to a PC for long-term storage and further analysis using Acterna's FiberASSISTANT PC software.

FiberASSISTANT

The powerful FiberASSISTANT PC software tool come free with every high performance OMK (also available free of charge from www.Acterna.com), speeds up the process of taking, recording and analysing measurements made using the OMK-14C, -15C or-18C high performance power meters. Parameter settings, data logging and data storage functions are provided. Documentation can be sorted and filed by cable, and a pass/fail assessment made

Automatic identification of individual fibers

Both pocket-sized and high performance OMKs can be used to detect the modulation frequency of the fiber to be measured, for identification purposes.

according to a user-set loss budget.

To speed up this process, high performance OMKs feature an audible signal identifying the fiber as one of four standard frequencies. The signal sounds as soon as the fiber is brought near the input.

Rugged field instrumentation and optimized power supply

All OMKs feature low power consumption for long battery life.

Power-down is automatic after 20 minutes, and remaining battery capacity is displayed whenever the on/off key is pressed. Operating time is further maximized by the use of low power components. Pocket size OMKs can be operated with dry or rechargeable AA batteries.

High performance OMKs can be operated with AC, dry or rechargeable AA batteries which can be changed in the field very easily. The units are supplied in a robust housing, with splash-proof foil keypad and protectors for the optical connectors, to ensure reliable operation even in harsh field conditions.

The right bag or case for every application

All pocket sized OMKs come supplied with a robust case with enough space for accessories and test cables. The OMK-14C and OMK-18C come with a compact nylon bag which allows room for the necessary accessories and test cables. The OMK-15C comes with a robust case with enough space for three instruments and test cables.

For the individual configuration of a customer specific OMK, Acterna offers separate bags and cases e.g. the MT-2 nylon bag together with the OLA-15B and an OLP-18C is the right combination for the commissioning of DWDM systems.

The very useful OVF-1 (visual fault locator) fits into every OMK case. The OVF-1 allows for the fast and easy identification of fibers as well as the detection of fiber faults.

| Telecom | Multimedia | Enterprise ne | etworks | Name | Features | |
|------------|------------|---------------|------------|---------|------------------------------|-----------------------|
| Local loop | CATV | WAN | LAN | | | |
| Transport | | single mode | multi-mode | | | |
| Test kits | | | | | | |
| | | | • | OMK-5 | OLS-5, OLP-5 | multi-mode; TwinTest |
| • | | • | | OMK-6 | OLS-6 + OLP-6 | single mode |
| • | • | | | OMK-7 | 0LS-6 + 0LP-8 | (1310-1550nm) |
| • | | • | | OMK-14C | OLS-15 + OLP-15C | single mode |
| • | | • | | OMK-15C | OLS-15 + OLP-15C +OLA-15B | single mode; TwinTest |
| • | • | | | OMK-18C | OLS-15 + OLP-18C | single mode |

| Ordering information | | |
|--|-----------------------|---------------------------|
| Optical test kits | | |
| - Acterna OMK-5 | T | BN 2126/05 |
| - Acterna OMK-6 F | C/PC, FC/APC | BN 2126/06, /61 |
| - Acterna OMK-6 | SC/PC, SC/APC | BN 2126/62, /63 |
| - Acterna OMK-7 F | C/PC, FC/APC | BN 2126/07, /74 |
| - Acterna OMK-7 | SC/PC, SC/APC | BN 2126/75, /76 |
| Accessories | | |
| Cleaning kit for optical connector | S | BN 2229/90.07 |
| Spare tape for cleaning kit | | BN 2229/90.08 |
| Cleaning sticks (OLS-6) | | BN 2256/90.05 |
| Dry batteries, Mignon (AA) type | | BN 2229/90.01 |
| (2 required per instrument) | | |
| NiCd cells, Mignon (AA) type | | BN 2229/90.02 |
| (2 required per instrument) | | |
| Battery charger (for external char | ging) | |
| – 230 V, European AC line plug | | BN 2229/90.03 |
| - 110 V, US AC line plug | | BN 2229/90.09 |
| - 230 V, UK AC line plug | | BN 2229/90.19 |
| Belt bag, per instrument | | BN 2256/90.01 |
| Transport case MK-5 | | BN 2126/90.01 |
| (space for 2 | 2 pocket sized instru | uments, 2 cables, OVF-1) |
| Transport bag MT-32 | | BN 2126/32 |
| | (space for 3 p | ocket sized instruments |
| | several cables | , OVF-1, battery charger) |

Detailed information on adapters, cables and optical sleeves can be found in separate datasheet: "Acterna fiber optic test adapters and cables".

| Acterna OMK-5 | optical test kit |
|---------------------------------|--|
| – 0LS-5 | Optical high Source (LED) 850/1300nm and operating manual |
| - OLP-5 | Optical Power Meter (-60 to +5 dBm)and operating manual |
| - K 3027 | multi mode test cable (50/125 μm) |
| - Cleaning stic | ks and tissues |
| 4 batteries | Mignon AA 1.5 V |
| 2 belt bags | , |
| MK-5 | transport case with inlay |
| | space for OVF-1 (Visual Laser Source) |
| | • |
| lcterna OMK-6 | optical test kit |
| - OLS-6 | Optical Laser Source 1310/1550 nm and operating manual |
| OLP-6 | Optical Level Meter (-65 to +10 dBm)and operating manual |
| · K 31xx | single mode test cable (9/125 μm) |
| - Cleaning stic | ks and tissues |
| 4 batteries | Mignon AA 1.5 V |
| - 2 belt pouche | es |
| - MK-5 | transport case with inlay |
| | space for OVF-1 (Visual Laser Source) |
| | |
| lcterna OMK-7 | optical test kit |
| - OLS-6 | Optical Laser Source 1310/1550 nm and operating manual |
| • OLP-8 | Optical Level Meter (-50 to +23 dBm)and operating manual |
| - К 31хх | Single mode test cable (9/125 μm) |
| - Cleaning stic | ks and tissues |
| 4 batteries | mignon AA 1.5 \ |
| - 2 belt bags | |
| - MK-5 | transport case with inlay |
| | space for OVF-1 (Visual Laser Source) |

| Acterna OLP-15C, -16C, -18C | |
|-----------------------------|--|
| Ordering information | |
| - Optical test kits | |

| Optical test kits | | |
|---------------------------------------|-------------|-------------------|
| Acterna OMK-14C | /PC or /APC | BN 2126/12 or /13 |
| Acterna OMK-15C | /PC or /APC | BN 2092/15 or /16 |
| Acterna OMK-18C | /PC or /APC | BN 2126/84 or /85 |

FiberASSISTANT (free download available from www.acterna.com)

Acterna OMK-14C, -15C, -18C, Acterna OLS-15, Acterna OLA-15B,

- PC documentation software

Accessories

| Optical connector cleaning kit | BN 2229/90.07 |
|---|---------------|
| Space tape for cleaning kit | BN 2229/90.08 |
| - NiCd cells, Mignon (AA) type | BN 2229/90.02 |
| (2 required per instrument) | |
| - Dry batteries, Mignon (AA) type | BN 2229/90.01 |
| (2 required per instrument) | |
| | |
| Battery charger (for external charging) | |
| 230 V, European AC line plug | BN 2229/90.03 |
| 110 V, US AC line plug | BN 2229/90.09 |
| 230 V, UK AC line plug | BN 2229/90.19 |
| | |
| AC Adapter NT-20 | |
| European version | BN 2238/90.02 |
| UK version | BN 2238/90.03 |
| US version | BN 2238/90.04 |
| Australian version | BN 2238/90.05 |
| Japanese version | BN 2229/90.06 |
| | |
| Neck strap | BN 820/00.52 |
| ABK-30 storage box for optical accessories | BN 2126/30 |
| Equipment case MK-1 | BN 2090/13 |
| (rigid shell case for 2 x OLX-1x plus accessories) | |
| Equipment bag MT-2 | BN 2126/01 |
| (nylon bag for 2 x OLX-1x plus accessories) | |
| Equipment bag MT-3 | BN 2126/02 |
| (nylon bag for 3 x OLX-1x plus accessories) | |
| Equipment bag MT-22 | BN 2126/22 |
| (nylon bag for 1 x OLX-1x and 1 x OLX-x plus accessories) | |
| Equipment bag MT-32 | BN 2126/32 |
| (nylon bag for 1 x OLX-1x and 2 x OLX-x plus accessories) | |
| Equipment case MK-4 | BN 2092/12 |
| / · · · · · · · · · · · · · · · · · · · | |

Detailed information about test adapters, cables and fiber optic sleeves can be found in separate datasheet: "Acterna fiber optic test adapters and cables".

(rigid shell case for 3 x OLX-1x plus accessories)

Delivery contents

Acterna optical test kit OMK-14C

| - OLS-15 | single port dual laser 1310/1550 nm including adapter |
|-----------------------------------|---|
| - OLP-15C | level meter (-70 to +20 dBm) including adapter |
| NiCd cells | Mignon AA 1.2V, set of 4 (2 per instrument) |
| - NT-20 | AC Adapter |
| – K 778 | RS-232 cable, 9-way plug |
| - S 911 | RS-232 adapter 25-way to 9-way |
| Cleaning tape | for plug end surfaces |
| − MT-2 | instrument bag with inlay |
| | space for OVF-1 (visual laser source) |
| | |

- Space for 2 neckstraps

Acterna optical test kit OMK-15C

| Acterna optical test kit olim | 1-136 |
|---|---|
| - 0LS-15 | single port dual laser 1310/1550 nm incl. adapter |
| OLA-15B | optical attenuator including 2 adapters |
| - OLP-15C | level meter (-70 to +20 dBm) including adapter |
| NiCd cells | Mignon AA 1.2V, set of 6 (2 per instrument) |
| - NT-20 | AC Adapter |
| – K 778 | RS-232 cable, 9-way plug |
| - S 911 | RS-232 adapter 25-way to 9-way |
| Cleaning tape | for plug end surfaces |
| − MK-4 | Rigid shell case with inlay |
| | space for OVF-1 (visual laser source) |
| Space for 3 neck straps | |

Acterna Optical Test Kit OMK-18C

| - OLS-15 | single port dual laser 1310/1550 nm incl. adapter |
|-----------------------------------|---|
| - OLP-18C | level meter (-60 to +26 dBm) including adapter |
| NiCd cells | Mignon AA 1.2V, set of 4 (2 per instrument) |
| - NT-20 | AC Adapter |
| – K 778 | RS-232 cable, 9-way plug |
| - S 911 | RS-232 adapter 25-way to 9-way |
| Cleaning tape | for plug end surfaces |
| − MT-2 | instrument bag with inlay |
| | space for OVF-1 (visual laser source) |
| _ | |

2 neck straps

| | Acterna OMK-14C | Acterna OMK-15C | Acterna OMK-180 |
|----------------------------|-----------------------------------|----------------------------------|----------------------------------|
| Laser source | 0LS-15 | 0LS-15 | OLS-15 |
| Level meter | 0LP-15C | OLP-15C | OLP-180 |
| Attenuator | | OLA-15B | |
| Level measurement | -70 to +20 dBm | -70 to +20 dBm | -60 to +26 dBm |
| Dynamic range with OLS-15* | 9/125 µm SM fiber | 9/125 µm SM fiber | 9/125 µm SM fibe |
| CW (continuous wave) | | | |
| 1310 nm | 63 dB (approximately, 160 km) | 63 dB (approximately, 160 km) | 53 dB (approximately, 130 km) |
| 1550 nm | 63 dB (approximately, 250 km) | 63 dB (approximately, 250 km) | 53 dB (approximately, 210 km) |
| with Auto- λ | | | |
| 1310 nm | 40 dB (approximately, 100 km) | 40 dB (approximately, 100 km) | 30 dB (approximately, 75 km) |
| 1550 nm | 40 dB (approximately, 160 km) | 40 dB (approximately, 160 km) | 30 dB (approximately, 120 km) |
| Dimensions (w x h x d) | approximately, 320 x 110 x 350 mm | approximately, 520 x 150 x 360mm | approximately, 320 x 110 x 350mm |
| Weight | approximately, 2.3 kg | approximately, 7.0 kg | approximately, 2.3 kç |

| Specifications: Acterna Optical To | est Kits OMK-5, -6, -7 | | |
|------------------------------------|---------------------------------|---------------------------------|---------------------------------|
| | Acterna OMK-5 | Acterna OMK-6 | Acterna OMK-7 |
| Laser source/LED | OLS-5 | OLS-6 | OLS-6 |
| Level meter | OLP-5 | OLP-6 | OLP-8 |
| Level measurement | -60 to + 5 dBm | -65 to + 10 dBm | -50+23dBm |
| Dynamic range with OLS-6 | 50/125 micrometers | 9/125 µm SM fiber | 9/125 µm SM fiber |
| CW (continuous wave) | | | |
| 850 nm | 40 dB (approximately 20 km) | | |
| 1300nm | 40 dB (approximately 50 km) | | |
| 1310 nm | | 58 dB (approximately 145 km) | 43 dB (approximately 110 km) |
| 1550 nm | | 58 dB (approximately 230 km) | 43 dB (approximately 170 km) |
| with Auto- λ | | | |
| 850 nm | 25 dB (approximately 12 km) | | |
| 1300 nm | 30 dB (approximately 40 km) | | |
| 1310 nm | | 40 dB (approximately 100 km) | 25 dB (approximately 60 km) |
| 1550 nm | | 40 dB (approximately 160 km) | 25 dB (approximately 100 km) |
| Dimensions (w x h x d) | approximately 360 x 90 x 310 mm | approximately 360 x 90 x 310 mm | approximately 360 x 90 x 310 mm |
| Weight | approximately 1.9 kg | approximately 1.9 kg | approximately 1.9 kg |

| Worldwide Headquarters | Regional Sales Headquarters | | | | |
|---|---|---|--|---|---|
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