fiber optic cleaning & testing tools

cost effective cleaning tools for connectors and adaptors & test equipment for fiber systems

- pen, reel, stick & airstream type cleaners
- microfiber tissues or air-solvent-air blasts
- removing even the smallest contaminants
- testing tools for cleaning result control:
  - microscopes (hand-held & bench-top)
  - optical power meters & light sources

www.amstechnologies-webshop.com
AMS Technologies – where technologies meet solutions

AMS Technologies is a leading solution provider and distributor of high-tech, leading-edge components, systems and equipment, with more than 35 years of experience to date and currently serving more than 3000 European customers.

We are the specialists in both components and complete solutions for Optical Technology, Thermal Management and Power Technology fields, with access to and long standing relationships with the most advanced manufacturers in each of those fields. Drawing extensively on our experience in each of these differing technologies, and coupling this with our broad system-level competence, we are able to offer seamless and comprehensive solutions incorporating complementary aspects from all three key technology fields.

With an appropriate technical education, an element of entrepreneurial spirit and many years of design and consultancy expertise, our sales engineers can rapidly comprehend system requirements and provide you with the necessary leading turnkey contract manufacturing services in our key competency fields.

AMS Technologies has been delivering solutions into a variety of high-tech markets, including renewable energies, medical, defence & aerospace, research & scientific and various other industrial segments. Our customer base consists of Europe’s largest leading technology corporations, a network of universities and research institutes as well as the most promising start-ups.

We thrive by working in a ‘customer first’ environment. Our pan-European customers are serviced from a network of local offices in Germany, the UK, France, Italy, Spain, Poland and Sweden, with a focused operations and logistics centre located in Munich, Germany.

Our commitment: Identifying the best solution for your project enabling you to become your customers’ first choice!

Your AMS Technologies team

fiber optic cleaning & testing tools

With rapidly growing transmission rates of state of the art fiber optic networks, the requirements on cleaning end faces of connectors becomes more stringent. Even the smallest contamination on the connector’s end face reduces the overall quality of the vy the end face quality with our range of testing tools like microscopes, power meters and optical sources.

optical connector cleaners

NEOCLEAN™, OPTIPOP™, CLETOP™ and CleanBlast series of cleaning tools available from AMS Technologies remove any contaminations from an optical connector’s end face with a dedicated microfiber tissue or non-contact air-solvent-air stream blasts. Microfiber material takes away all contaminations you can’t even see and secures them – without scratching the surface. The antistatic concept prevents static load which could bring new contamination after the cleaning. Unlike traditional cleaning concepts, this method does not degrade optical return loss. Featuring compact design with workability in mind, products include cleaning tools for the end-faces and ferrules of fiber optic connectors, as well as for the end faces of plugged connectors through an adapter. Utilizing a different approach, the non-contact CleanBlast series cleans end faces with a high flow rate jet across the fiber’s surface.

fiber optic testing tools

AMS Technologies provides a wide range of tools for end face quality control of optical connectors. Microscopes in hand-held and bench-top format offer the possibility to visually assess the cleanliness of the end face in detail. And a combination of optical power meter and optical light source provides quantitative data for the quality of the optical transmission. These devices are available in both shirt-pocket and portable formats with different features, as single devices as well as a combination of source and meter in one unit.
**NEOCLEAN® Series**

The tool that combines compactness and the workability of one-push cleaning.

NEOCLEAN-E, EZ series, and NEOCLEAN-M are all high performance hybrid type cleaners that provide cleaning for both optical connector plugs and adaptors in one unit.

### NEOCLEAN-E, EZ series – main connector/cleaner compatibility chart

<table>
<thead>
<tr>
<th>Object Plug/Adaptor</th>
<th>Type</th>
<th>Product</th>
<th>NEOCLEAN-E</th>
<th>NEOCLEAN-EZ</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pen Type</td>
<td>Model #</td>
<td>ATC-NE-E1</td>
<td>ATC-NE-E2</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>ATC-NE-E3</td>
<td>ATC-NE-EZ1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ATC-NE-EZ2</td>
<td>ATC-NE-EZ3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ATC-NE-EZ1P</td>
<td>ATC-NE-EZv</td>
</tr>
</tbody>
</table>

#### NEOCLEAN-E

- **Model #**: ATC-NE-E1, ATC-NE-E2, ATC-NE-E3
- **Compatible Connectors**: MU, LC, SC, SC2, FC, FAS, FA
- **Size (mm)**: L: 240, L: 230, L: 230
- **Usages**: Over 750 Times

#### NEOCLEAN-EZ

- **Model #**: ATC-NE-EZ1, ATC-NE-EZ2, ATC-NE-EZ3, ATC-NE-EZ1P, ATC-NE-EZv
- **Compatible Connectors**: MU, LC, SC, SC2, FC, FAS, FA
- **Size (mm)**: L: 104 (with attachment: 113 / extended: 167), L: 109 (with cap: 121), L: 107 (with cap: 113), L: 109 (with cap: 121)
- **Usages**: Over 400 Times

#### NEOCLEAN-M

- **Model #**: ATC-NE-M1, ATC-NE-M2, ATC-NE-R2, ATC-ST-01N, ATC-ST-02N
- **Compatible Connectors**: MPO, MTP® (pins yes/no), SC, FC, ST, E2000, SMPTE304M* Ø1.25 mm Ø2.5 mm
- **Size (mm)**: L: 197 x W: 15 x H: 51, L: Max. 152 - Min. 45
- **Usages**: Over 600 Times, Over 400 Times
- **Packaging Specs.**: 250 Sticks/Set

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**Fiber optic cleaning & testing tools 05**
The assurance and reliability of high quality, born from our know-how of optical connector standardization and compatibility testing.

NTT-AT’s OPTIPOP Series was born out of the optical connector standardization and compatibility testing know-how that comes from our company’s many years of experience. We also listened to the voices of on location workers so that various devices that support smooth and helpful work are utilized in each part.

**OPTIPOP® Series**

A lineup of 4 kinds to match different types of optical connectors. The dustproof shutter allows you to open a new cleaning surface with a single hand, even in a place with limited working spaces, while providing the same cleaning power as the R series.

**OPTIPOP R**

This cleaner for single core connectors has a one-action lever no matter what working environment you are in.

**OPTIPOP C**

In consideration of the health of workers and the surrounding environment, there is no need for any cleaning fluids such as organic alcohol, etc. When a connector with 2.0/2.5mm ends, they are ideal for the optical composite devices. Also equipped with a dustproof shutter, its light brush opening only allows for even gentle use of air for the operator.

**OPTIPOP Stick**

Available in 4 kinds to match different types of optical connectors. Also equipped with a dustproof shutter, its light brush opening only allows for even gentle use of air for the operator.

**Contact us**

**Compatible Connectors**

- **Type**
  - Single core (ideal for Ø2.5mm)
  - Single core (MT-RJ end)
  - Multi core (no pin)
  - Single core (MT, MPO end)

**Product Specifications**

<table>
<thead>
<tr>
<th>Model #</th>
<th>Catalog Contents</th>
<th>Plug Type</th>
<th>Cassette Grip Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATC-RE-01</td>
<td>Single core</td>
<td>A Type</td>
<td></td>
</tr>
<tr>
<td>ATC-RE-02</td>
<td>Single core</td>
<td>B Type</td>
<td></td>
</tr>
<tr>
<td>ATC-RE-03</td>
<td>MT-RJ (with pin)</td>
<td>CLETOP</td>
<td></td>
</tr>
<tr>
<td>ATC-RE-04</td>
<td>MT-RJ (with pin)</td>
<td>CLETOP</td>
<td></td>
</tr>
<tr>
<td>ATC-CA-01</td>
<td>Single core</td>
<td>OPTIPOP</td>
<td></td>
</tr>
<tr>
<td>ATC-CA-02</td>
<td>Single core</td>
<td>OPTIPOP</td>
<td></td>
</tr>
<tr>
<td>R2</td>
<td>CLETOP-S</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R3</td>
<td>CLETOP Stick</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R4</td>
<td>CLETOP Stick</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CLETOP® Series**

The assurance and reliability of high quality, born from our know-how of optical connector standardization and compatibility testing.

NTT-AT’s CLETOP series was born out of the optical connector standardization and compatibility testing know-how that comes from our company’s many years of experience. We also listened to the voices of on location workers so that various devices that support smooth and helpful work are utilized in each part.

**CLETOP**

Easily removes contamination on the adaptor ferrule end face. With both 2.0mm and 2.5mm ends, they are ideal for the optical composite connectors (FENDA/CON). Various devices that support smooth and helpful work are utilized in each part.

**CLETOP-S**

Easily removes contamination on the adaptor ferrule end face. With both 2.0mm and 2.5mm ends, they are ideal for the optical composite connectors (FENDA/CON). Various devices that support smooth and helpful work are utilized in each part.

**CLETOP Stick**

Easily removes contamination on the adaptor ferrule end face. With both 2.0mm and 2.5mm ends, they are ideal for the optical composite connectors (FENDA/CON). Various devices that support smooth and helpful work are utilized in each part.

**Adaptors**

- **Type**
  - 2.5mm Type
  - 2.0mm Type
  - 2.0mm/2.5mm Double-sided Type

**Product Specification**

<table>
<thead>
<tr>
<th>Model #</th>
<th>Catalog Contents</th>
<th>Plug Type</th>
<th>Cassette Grip Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>14100400</td>
<td>Single core (Ø2.5mm)</td>
<td>A Type</td>
<td></td>
</tr>
<tr>
<td>14100401</td>
<td>Single core (Ø2.5mm)</td>
<td>B Type</td>
<td></td>
</tr>
<tr>
<td>14100402</td>
<td>Single core (Ø2.5mm)</td>
<td>MPO Type</td>
<td></td>
</tr>
<tr>
<td>14100403</td>
<td>Single core (Ø2.5mm)</td>
<td>MT-RJ Type</td>
<td></td>
</tr>
<tr>
<td>14100404</td>
<td>Single core (Ø2.5mm)</td>
<td>MT Type</td>
<td></td>
</tr>
</tbody>
</table>

**Packing Specifications**

- **Object**
  - CLETOP-S
  - CLETOP Stick
- **Size (mm)**
  - W:125 × D:35 × H:85
  - W:130 × D:40 × H:75
- **Type**
  - Tape/White
  - Blue/White
  - Blue/White
  - White/White
  - Tape/White
- **Weight**
  - 32.0g (±10g)
  - 24.0g (±8g)
  - 12.0g (±4g)
  - 16.0g (±4g)
  - 24.0g (±8g)
  - 12.0g (±4g)

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cleaning optical connectors with a blast

CleanBlast™ system – portable

advanced fiber optic connector end face cleaning system

The patented Viavi Solutions portable CleanBlast fiber end face cleaning system provides a fast, effective, and cost-efficient solution for removing dirt and debris from connectors in most common applications. The precise, highly efficient, non-contact air-solvent-air stream blasts remove contamination with nearly 100% effectiveness.

key features

• provides rapid, controlled, and repeatable cleaning and removal of contamination from fiber end faces
• uses a precise non-contact air-solvent-air mixture/sequence to blast and remove contamination particles
• eliminates user sensitivity and error
• removes, rather than spreading or smearing, loose debris from fiber end faces at the push of a button
• offers a comprehensive selection of precision cleaning tips and adapters
• input for optional microscope and LCD display for fiber inspection capability

CleanBlast™ system – bench-top

non-contact solution using a stream of pressurized gas

Viavi Solutions’ CleanBlast bench-top system is a non-contact device using a highly filtered stream of pressurized gas with a vacuum circuit to create a high flow rate jet across the surface of the fiber. A 30 µl cleaning solvent is injected into the airflow, and the contamination from the end face along with the solvent are then removed through the retrieval circuit.

CleanBlast bench-top systems include a base unit and a handset connected to a 5 ft umbilical for reaching various application areas. Precision cleaning tips are available for both male (patch cord) and female (bulkhead) connectors for various connector types including SC, LC, FC, ST, E2000, MPO, MPX, MT, and SMA.

key features

• provides rapid, controlled, and repeatable cleaning and removal of contamination from fiber end faces
• uses a precise non-contact air-solvent-air mixture/sequence to blast and remove contamination particles
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• removes, rather than spreading or smearing, loose debris from fiber end faces at the push of a button

microscopes for fiber optic connectors

P5000i digital analysis microscope

key features

• repeatable pass/fail analysis eliminates subjective guesswork from the measurement process
• user-selectable acceptance profiles allow certification to any acceptance criteria
• includes FiberChekPRO™ software for analysis and reporting with PC/laptop
• automatic image centering ensures the fiber is always in the center of the screen
• dual magnification switching allows easy toggling between low & high magnifications in both live and analysis views

KI 6610 handheld fiber inspection microscope

key features

• compact, lightweight, reliable
• >200, >400, >40 magnification versions
• excellent image quality & depth of focus
• stable triple-mode LED illumination with timer: coaxial, oblique & core
• enhanced eye safety for red and infrared light
• tripod & lanyard mount
• universal connector adaptors for most simplex and duplex connectors

FVAi/FVDi digital bench-top microscopes

inspection solutions for fiber connector production

From post-polish qualification inspection to end-of-line compliance certification, the FVAi/FVDi microscopes are the ideal benchtop inspection solution for any fiber production facility by giving users a single system that is scalable to optimize throughput at any stage of the production process. With onboard capabilities for fiber inspection, pass/fail image analysis and storage, they eliminate the need to connect with an external PC. In addition, the integrated 3.5 in LCD video display gives users full control of the device without the need for an external monitor.

key features

• all-in-one automated system for fiber end face testing and certification
• autofocus and auto-center
• locates and counts defects and scratches
• automated pass/fail analysis
• adjustable automation settings from all-manual to all-automated
• integrated 3.5 in color touchscreen
• easy to use graphical menu-driven interface
KI 9800A – pocket optical fiber source

The KI 9800A series shirt-pocket fiber source is used to test optical loss, multi-fiber polarity checking or fault finding in all optical fiber systems, at 1 to 3 wavelengths. High productivity, high stability, rugged construction and ease of use combine to achieve superior measurement confidence. When used with an autotest-compatible power meter or loss test set, one-button multi-wavelength loss testing is achieved.

Key features
- source or VFL options for all fiber types
- rugged shirt-pocket size with spring clip
- excellent optical power stability and re-connection repeatability
- interchangeable connectors
- multi-fiber ID tone source feature
- mode controlled multimode sources
- eye-safe long distance VFL to 10 km

KI 9600A – pocket optical power meter

The KI 9600A series shirt-pocket optical power meter is used for testing fiber optic communications systems. 2% calibration accuracy, ease of use and high availability combine to achieve superior measurement confidence. Detector & calibration options cover a wide range of connector types, fiber types, common wavelengths and power levels from +24 to -60 dBm.

Key features
- rugged shirt pocket size with spring clip
- 9 calibrated wavelengths
- patented low-cost interchangeable connector
- multi-fiber ID for fiber identification
- displays dBm, dB, linear, tone Hz
- power averaging mode for modulated signal
- memory for individual threshold settings for pass/fail analysis
- multiple wavelengths (source)
- fast download results using the USB port
- permanent reference-level storage
- efficient testing
- auto-lambda and multi-lambda test functions

KI 2400/2800 – hand-held light sources

The KI 2400 series zero warm-up optical source uses an advanced optical stabilization method to offer ultra-high stability, immunity to ambient temperature variations and zero warm up time. Typical applications include very high precision fiber optic attenuation and loss measurement, often desirable for connector or component testing, R&D etc. The KI 2800 series LED & laser source is a general-purpose test source for multimode & single mode systems.

Key features
- easy to use, rugged & versatile
- unique zero-warm-up drift performance (KI 2400)
- superior re-connection repeatability, < 0.1 dB
- maximum drift over temp specification
- unaffected by varying return loss
- interchangeable connectors with dust cap & tilt bail
- autotest & multi-fiber ID tone generator

KI 2600 – hand-held power meter

The KI 2600 series fully-featured handheld power meter is used by professional installers and contractors to test power, loss, continuity and faults on all types of fiber optic systems. In addition to excellent basic accuracy, intuitive use and rugged reliability, it has comprehensive report generation capabilities and a variety of useful features for productivity. Options cover power levels from +33 to -70 dBm, all useful wavelengths and all power levels fiber and connector types including duplex/ribbon and large core POF fiber.

Key features
- reliable, rugged & versatile, simple to use
- 28 genuine 1% calibration wavelengths
- very long battery life
- interchangeable connectors with dust cap / tilt bail
- memory with test, timestamp and USB dump
- simultaneous 3 loss display with autotest source
- optional visual fault finder

OMK-3x – optical test kits

The OMK-3x series of pocket-sized, shock-resistant and splash-proof optical test kits provide essential tools for power and insertion loss measurement or continuity checks. Equipped with an optical power meter (OLP-3x) and a dual or quad-wavelength optical light source (OLS-3x), they are ideal solutions for field use. With switchable (light source) and universal push-pull (power meter) adapters, OMK-3x test kits are ready for every connector type.

Key features
- essential optical test kits for enterprise and service provider applications
- battery-operated, field-portable optical return loss meter
- 500 to 1650 nm measurement range (power meter)
- multiple wavelengths (source)
- fast download results using the USB port
- permanent reference-level storage
- efficient testing
- auto-lambda and multi-lambda test functions

ORL-85/85P – optical return loss meters

The ORL-85/85P series of fiber optical return loss meters with angled single-mode test port (APC) combine optical power meter (OPM), light source (OLS), continuous wave return loss meter (OCWR) and connector inspection in one unit. It is ideal for measuring optical return loss and inspecting fiber connector end faces to verify optical connection quality.

Key features
- battery-operated, field-portable optical return loss meter
- 1260 to 1650 nm measurement range (power meter)
- multiple wavelengths (source)
- return loss up to 70 dB
- adapters for FC, SC, ST and LC optical connectors
- individual threshold settings for pass/fail analysis
- auto-lambda and multi-lambda test functions

MPOLx – MPO optical loss test sets

The MPOLx optical loss test sets provide a source and power meter that integrate essential test capabilities together to ensure a fast and reliable workflow when testing and certifying network links with native MPO connectivity. It allows a single technician to inspect MPO end faces and perform tests from either end of the connection, reducing walking back and forth between the two units. MPOLx delivers comprehensive test results in less than 6 seconds for all 12 fibers of the connector.

Key features
- measures length and optical loss at multiple wavelengths
- checks polarity for all 12 MPO fibers
- provides native MPO testing directly on devices
- delivers test results for all 12 MPO fibers in <6 s
- provides native MPO-face inspection and automated analysis for both trunk cables and buildkeys
- dual wavelength optical light sources
- encrypted flux compliant

KI 6358 – optical visual fault locator

The KI 6358 visual fault locator is a small, high quality and very low skill fiber cable tester. It has only one button and an operating range of a few km. Visible light is injected into the fiber under test and can be seen from a fiber end or through most 3 mm cable types at a break or loss point. Usually, this pen meets class 1 safety standards (IEC60825 2011) for total emitted power when no fiber is connected, so it does not need any special eye safety precautions under any condition.

Key features
- easy, compact pen-style checker
- the smallest pen with two AAA alkaline batteries
- quality drop-resistant metal & rubber body
- class 1 eye safety, 2011 IEC standards
- needs no special eye safety precautions
- 2.5 mm universal connector & translucent captive cap
- will not turn on by mistake, or roll off a bench
- selectable continuous or pulsed operation
enabling your ideas.
Optical, Power and Thermal Management Technologies

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