

Kokyo

株式会社光響

Email : info@symphotony.com

Web : <https://www.symphotony.com/>

Inspection Products



LIGHTTEL

Why Inspect?

Dirty fiber optic connectors are one of the most common causes of optical network issues and can cause network slow-downs, bit errors and even network outages. With network speeds continually increasing to support Internet applications such as OTT video streaming, gaming and other services, it becomes more important than ever to maintain physical layer integrity and have clean fiber optic connectors to support these higher bandwidths.

At the same time network speeds are increasing, the physical space needed to house the network equipment may not be expanding, requiring ever higher rack densities. Yet service providers are under tremendous pressure to expedite fiber deployments and minimize network faults.

Data center technicians, service providers, and other users need inspection tools that quickly and accurately analyze the fiber optic connector endfaces for contaminants. Lightel designs, develops and manufactures a portfolio of fiber inspection probes and inspection tips for today's most demanding requirements.

Features Comparison

	CI-1100-A2	CI-1100-AB2	DI-1000 DI-1000L	DI-1000MPO+	ViewConn®	ViewConn Plus
Eye-Safe Video Inspection	✓	✓	✓	✓	✓	✓
Hand Held	✓	✓	✓	✓	✓	✓
CE Approved	✓	✓	✓	✓	✓	✓
RoHS Compliant	✓	✓	✓	✓	✓	✓
LCD Display	✓	✓			✓	✓
USB Connectivity	*	✓	✓	✓	✓	✓
PC and APC Connector Viewing	✓	✓	✓	✓	✓	✓
Male Connector Viewing	✓	✓	✓	✓	✓	✓
Female Connector Viewing	✓	✓	✓	✓		✓
Carrying Case	✓	✓	✓	✓	✓	✓
Digital Zoom			✓	✓		
WiFi			*	*		
MPO Scanning Knobs				✓		
Built-In Cleaning Module					✓	✓
Two Optical Modules						✓
ConnectorView Plus Pass/Fail Software		*	*	*	*	*
Integrated Optical Power Meter					*	*

*Available Option

CI-1100-A2

The CI-1100-A2 is a portable hand-held video microscope with LCD display for inspecting fiber optic connector endfaces. For single mode and multimode connectors.

- A probe for inspecting patch cord connectors and bulkhead adapters
- A large 3.5" fold-up LCD monitor
- Available USB2.0 adapter for image viewing and capture on Windows®-based PCs
- AC or rechargeable battery operation for use in any location
- Available IR filter option for "hot" fiber inspection



Specifications

Probe		Monitor	
Field of View	~425µm x 320µm	Display	3.5" TFT-LCD, 960 x 240 pixels
Resolution	0.5µm detectable	Controls	Adjustable brightness and contrast
Focus	Manual adjustment, 2mm max travel	Dimensions	105mm x 90mm x 45mm (folded)
Camera	1/4" CCD	Weight	255g (without battery)
Light Source	Blue LED	Power Supply	9.6V battery pack or AC power supply
Dimensions	175mm x Ø35mm (probe without cap)	Battery Life	4 hours
Weight	200g	Charger/AC Adapter	US, EU, UK and Australian versions available

<http://lightel.com/product/78/ci-1100-fiber-optic-connector-inspector>

DI-1000-B2

The DI-1000 is a portable hand-held video microscope with USB2.0 connectivity for inspecting fiber optic connector endfaces. For single mode and multimode connectors.

- A digital probe for inspecting both patch cord connectors and bulkhead adapters
- Direct USB2.0 connection to Windows-based PCs and notebooks
- Built-in image capture button
- Digital zoom
- Software included for viewing, capture and documentation. Optional Pass/Fail software available
- Powered through the USB connection
- Available IR filter option for "hot" fiber inspection
- Optional WiFi Connectivity for Windows, Android®, and iPhone®

Specifications

Field of View	~425µm x 320µm
Resolution	0.5µm detectable
Focus	Manual adjustment, 2mm max travel
Camera	1/4" CCD
Light Source	Blue LED
Power Supply	PC USB2.0 port
Dimensions	175mm x Ø35mm (probe without cap)
Weight	200g
Operating Systems	Windows XP®, Vista®, 7®, 8®, & 10® 32-bit and 64-bit processors

<http://lightel.com/product/79/di-1000-digital-inspection-probe>



DI-1000L-PRO

The DI-1000L-PRO combines the wide-view DI-1000L with our ConnectorView™ Plus v2 Pass/Fail software for fast objective analysis of fiber optic connector endfaces. For single mode and multimode connectors.

- A digital probe for inspecting both patch cord connectors and bulkhead adapters
- Direct USB2.0 connection to Windows-based PCs and notebooks
- Built-in image capture button
- Digital zoom
- Auto-centering of the ferrule image with Pass/Fail analysis
- Optional inclusion of detailed notes in the Analysis Reports
- Use IEC 61300-3-35 as analysis criteria, or set your own
- Available IR filter option for "hot" fiber inspection
- Optional WiFi Connectivity for Windows, Android, and iPhone



Specifications

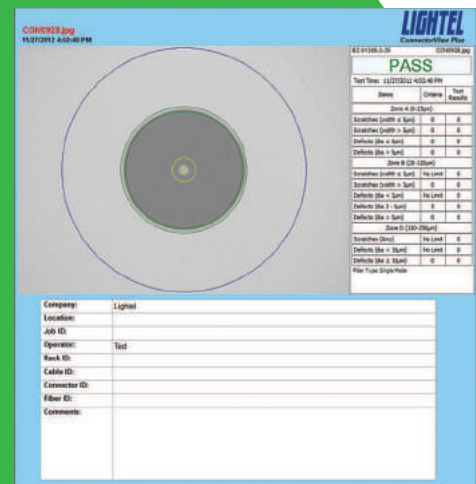
Field of View	~640µm x 480µm (standard)
Resolution	0.5µm detectable
Focus	Manual adjustment, 2mm max travel
Camera	1/3" CMOS
Light Source	Blue LED
Power Supply	PC USB2.0 port
Dimensions	175mm x Ø35mm (probe without cap)
Weight	200g
Operating Systems	Windows XP, Vista, 7, 8, & 10 32-bit and 64-bit processors

<http://lightel.com/product/106/di-1000l-pro>

ConnectorView Plus

ConnectorView Plus software is designed for users needing portable automated Pass / Fail software to check for fiber optic connector endface contamination. Can be used with any Lightel video microscope through a USB2.0 port. For Windows XP, Vista, Windows 7, Windows 8, and Windows 10 32 and 64-bit PCs.

- Self-calibrating – no need to constantly readjust settings
- Single mode and multimode connector settings
- Include notes in your Analysis Reports
- Adjustable acceptance criteria – Use default IEC 61300-3-35 or set to your own corporate requirements. The criteria used are shown on every report
- Summary reports available in Excel or a text file for every saved analysis report
- Save only the reports you choose, or save them automatically
- Automatic centering when used with DI-1000L



<http://lightel.com/product/80/connectorview-plus-software>

DI-1000MPO+

The DI-1000MPO+ incorporates the same features and uses the same single fiber tips and accessories as the popular DI-1000, but adds additional X- and Y-direction scanning knobs. This allows the user to manually scan in both the X and Y directions with one hand, providing unprecedented control and increasing the efficiency of inspecting the endfaces of MTP®/MPO connectors. No additional MTP/MPO tips are necessary to inspect one to four row (12 to 48 fibers) MTP/MPO connectors.



- X- and Y- direction scanning knobs enable one hand MPO inspection
- A digital probe for inspecting both patch cord connectors and bulkhead adapters
- Direct USB2.0 connection to Windows-based PCs and notebooks
- Built-in image capture button
- Auto-centering of the ferrule image with Pass/Fail analysis
- Use IEC 61300-3-35 as analysis criteria, or set your own
- Optional WiFi connectivity for Windows, Android, and iPhone

Specifications

Field of View	~425µm x 320µm
Optical Resolution	≤ 1.5µm
Detectable Resolution	≤ 0.5µm
Focus	Manual adjustment, 2mm max travel
Horizontal Adjustment (X)	4.8mm max travel
Vertical Adjustment (Y)	1.2mm max travel
Camera	1/3" CCD
Power Supply	PC USB2.0 port
Dimensions	175mm x Ø35mm (probe without cap)
Weight	225g
Operating Temperature	0°C to 50°C
Storage Temperature	-20°C to 70°C
Operating Systems	Windows XP, Windows Vista, Windows 7, Windows 8, & Windows 10 32-bit and 64-bit processors

<http://lightel.com/product/126/di-1000mpo-plus-digital-inspector>



DI-1000-WIFI

Lightel's Digital Inspector product series offers a wireless option for inspecting optical fiber connectors. Our DI WiFi adapter converts the probe's USB video output into a wireless signal, enabling users to view and save images of a fiber endface on their smartphone, tablet, or PC or perform pass/fail analysis (with ConnectorView Plus software on their Windows PC).

Specifications

Battery Life (with DI-1000)	>6 hrs continuous operation
Dimensions	97mm x 45mm x 30mm
Weight	135g
Video Probe Connection	USB2.0

<http://lightel.com/product/110/di-1000-wifi>

ViewConn® VC-6200

Ruggedized for the field, this portable hand-held video microscope is used to inspect and clean fiber optic connector endfaces. For single mode and multimode connectors.

- Inspect and clean with one unit
- A large 3.5" built-in display screen
- USB2.0 connection for viewing, capture and documentation on Windows-based computers. Easy-to use software included. Optional Pass/Fail software available
- Replaceable cleaning cassette attached
- Ruggedized cover
- AC or rechargeable AA battery operation for use in any location
- Universal UPC, APC and specialty tips are available



Specifications

Field of View	~425µm x 320µm	Power Supply	4 AA rechargeable batteries or AC power supply
Resolution	0.5µm detectable	Battery Life	4 hours
Focus	Manual adjustment, 2mm max travel	Charger & AC Adapter	US, EU, UK and Australian versions available
Light Source	Blue LED	Dimensions	170mm x 95mm x 30mm
Display	3.5" TFT-LCD, 960 x 240 pixels	Weight	350g (without battery)
Controls	Adjustable brightness and contrast		

<http://lightel.com/product/74/viewconn>

ViewConn Plus VC-6200-PL

The VC-6200 Plus includes the same features as the VC-6200 but also provides dual microscope operation, allowing the inspection of both patchcord and bulkhead adapters without changing tips.

- Dual microscopes (built-in and probe) enable rapid inspection of patch cords and in bulkhead adapters at the flip of a switch
- Inspect and clean patch cords with one unit
- A large 3.5" built-in display screen
- USB2.0 connection for viewing, capture and documentation on Windows computers. Software included, optional Pass/Fail software available
- Replaceable cleaning cassette attached
- Ruggedized cover
- AC or rechargeable AA battery operation for use in any location



Specifications

Field of View	~425µm x 320µm
Resolution	0.5µm detectable
Focus	Manual adjustment, 2mm max travel
Light Source	Blue LED
Display	3.5" TFT-LCD, 960 x 240 pixels
Controls	Adjustable brightness and contrast
Power Supply	4 AA rechargeable batteries or AC power supply
Battery Life	4 hours
Charger & AC Adapter	US, EU, UK and Australian versions available
Dimensions	170mm x 95mm x 30mm
Weight	350g (without battery)

<http://lightel.com/product/75/viewconn-plus>

ViewConn VC6-OPM/OPM-H

The VC6-OPM is an optical power meter designed to attach to Lightel's ViewConn hand-held microscope. Able to store 999 readings, the VC6-OPM shares ViewConn's batteries and large easy-to-read display screen. It adds accurate optical power testing to ViewConn's cleaning and inspection capabilities creating an integrated 3-in-1 hand-held device.

- Calibrated wavelengths of 850, 1300, 1310, 1490, 1550 and 1625nm
- Power range from -60dBm to +10dBm (VC6-OPM)
- Power range from -45dBm to +26dBm (VC6-OPM-H)
- Resolution 0.01dB
- Tone detection at 270Hz, 1kHz and 2kHz
- Data storage of 999 readings
- Simple USB download with save to text or Excel feature



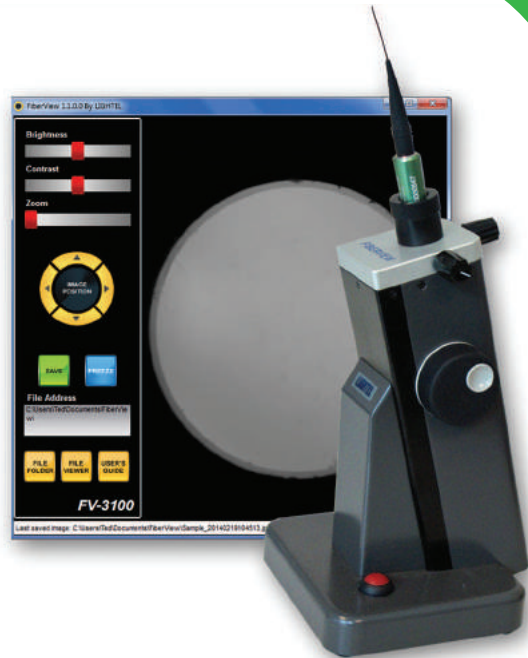
<http://lightel.com/product/76/viewconn-power-meters>

Benchtop Units

FiberView FV-3100

With a 1400µm by 1000µm Field of View (FOV), the FV-3100 is an ideal solution for inspecting large diameter fiber for medical, high power and other critical applications. It is powered by its USB connection to a Windows PC and includes software for image viewing and capture.

<http://lightel.com/product/107/fiberview-fv-3100>



ArrayView AV-4800

For situations where documentation is key, the AV-4800 inspects MTP/MPO connectors, quickly capturing and saving an image of the entire connector endface with the included software. Powered by its USB connection to a Windows PC, ArrayView enables easy cleaning of the connector during the inspection process.

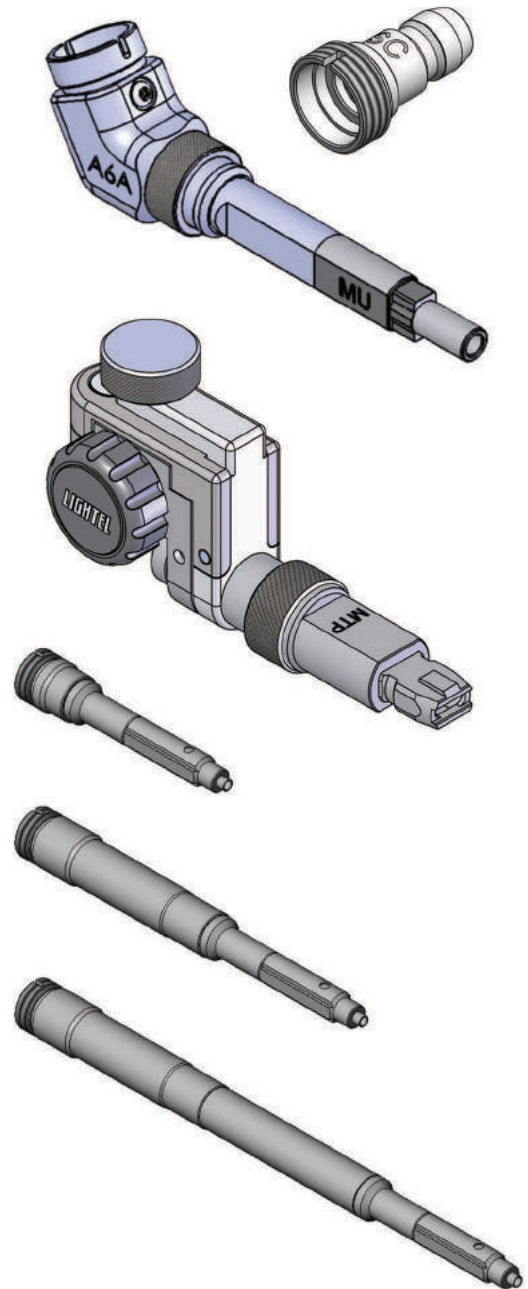
<http://lightel.com/product/109/arrayview-4800>

Male	
Universal 2.5mm probe tip for PC type male connectors	PT2-U2.5/PC/M
Slim 2.5mm probe tip for PC type termini	PT2-TM2.5/PC/M
Universal 1.25mm probe tip for PC type male connectors	PT2-U1.25/PC/M
Slim 1.25mm probe tip for male LuxCis, LEMO F7 and termini	PT2-TM1.25/PC/M
Universal 2.0mm probe tip for PC type male termini and LEMO F2	PT2-U2.0/PC/M
Slim 1.6mm probe tip for PC type male connectors and termini	PT2-TM1.6/PC/M
Tip for SMA 905 male connectors	PT2-SMA/PC/M
<i>Universal 2.5mm probe tip for APC type male connectors</i>	<i>PT2-U2.5/APC/M</i>
<i>Universal 1.25mm probe tip for APC type male connectors</i>	<i>PT2-U1.25/APC/M</i>
Female	
SC	
Tip for SC PC type female connectors	PT2-SC/PC/F
Short Extended tip for SC PC type female connectors	PT2-SC/PC/F-S
Medium Extended tip for SC PC type female connectors	PT2-SC/PC/F-M
Long Extended tip for SC PC type female connectors	PT2-SC/PC/F-L
60° angled tip for SC PC type female connectors	PT2-SC/PC/F-A6
<i>Tip for SC APC type female connectors</i>	<i>PT2-SC/APC/F</i>
<i>Short Extended tip for SC APC type female connectors</i>	<i>PT2-SC/APC/F-S</i>
<i>Medium Extended tip for SC APC type female connectors</i>	<i>PT2-SC/APC/F-M</i>
<i>60° angled tip for SC APC type female connectors</i>	<i>PT2-SC/APC/F-A6</i>
<i>Tip for hardened SC/APC (Optitap®) female connectors</i>	<i>PT2-OTAP/APC/F</i>
FC	
Tip for SC and FC PC type female connectors	PT2-FS/PC/F
Short Extended tip for FC and SC PC type female connectors	PT2-FS/PC/F-S
Medium Extended tip for FC and SC PC type female connectors	PT2-FS/PC/F-M
60° angled tip for FC and SC PC type female connectors	PT2-FS/PC/F-A6
<i>Tip for SC and FC APC type female connectors</i>	<i>PT2-FS/APC/F</i>
ST	
Tip for ST PC type female connectors	PT2-ST/PC/F
Short Extended tip for ST PC type female connectors	PT2-ST/PC/F-S
Long Extended tip for ST PC type female connectors	PT2-ST/PC/F-L
60° angled tip for ST female connectors	PT2-ST/PC/F-A6
E2000	
Short Extended tip for E2000 PC type female connectors	PT2-E2K/PC/F-S
Medium Extended tip for E2000 PC type female connectors	PT2-E2K/PC/F-M
<i>Tip for E2000 APC type female connectors</i>	<i>PT2-E2K/APC/F</i>
LC	
Tip for LC PC type female connectors	PT2-LC/PC/F
Short Extended tip for LC PC type female connectors	PT2-LC/PC/F-S
Medium Extended tip for LC PC type female connectors	PT2-LC/PC/F-M
60° angled tip for LC PC type female connectors	PT2-LC/PC/F-A6
<i>Tip for LC APC type female connectors</i>	<i>PT2-LC/APC/F</i>
MU	
Tip for MU PC type female connectors	PT2-MU/PC/F
Short Extended tip for MU PC type female connectors	PT2-MU/PC/F-S
Long Extended tip for MU PC type female connectors	PT2-MU/PC/F-L
60° angled tip for MU PC type female connectors	PT2-MU/PC/F-A6
Specialty	
Tip for LEMO female connectors (SMPTE F2)	PT2-LEMO/PC/F
Tip for SMA 905 female connectors	PT2-SMA/PC/F
Tip for 2.0mm female termini	PT2-TM2.0/PC/F
Tip for 1.6mm female termini	PT2-TM1.6/PC/F
Tip for ELIO 2.5mm female connectors	PT2-ELIO2.5/PC/F
Guide and universal tip for male and female TFOCA II connectors	PT2-TFO2-KIT
Tip for LX.5 PC female connectors	PT2-LX.5/PC/F
<i>Tip for LX.5 APC female connectors</i>	<i>PT2-LX.5/APC/F</i>
MTP/MPO (for both male and female connectors)	
Extended tip for MTP PC type connectors	PT2-MTP/PC-EXT
Extended tip for MTP multi-row PC type connectors	PT2-MTP/PC-XY-EXT
<i>Extended tip for MTP/APC connectors</i>	<i>PT2-MTP/APC-EXT</i>
<i>Tip for OptiTip® APC type connectors</i>	<i>PT2-OTIP/APC</i>

Partial List of Tips

Lightel offers a line of over 100 UPC and APC tips for our microscopes including extended reach and 60° angled tips available for difficult access applications. Various ribbon connector tips are also available.

A complete list can be found on our website at <http://lightel.com/product/82/series-2-tips>.



2210 Lind Ave SW Suite 100 Renton, WA 98057 USA
 (425) 277-8000 ph • (425) 277-5280 fax
 sales@lightel.com • www.lightel.com