

Optical Fiber Instruments

Interferometric Inspection System



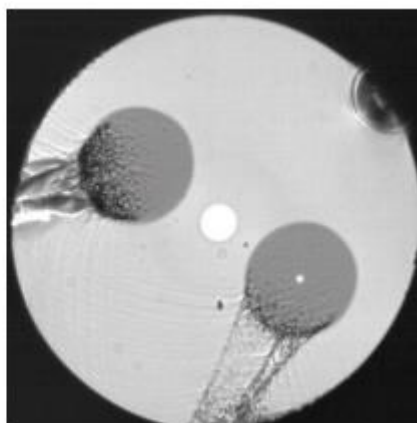
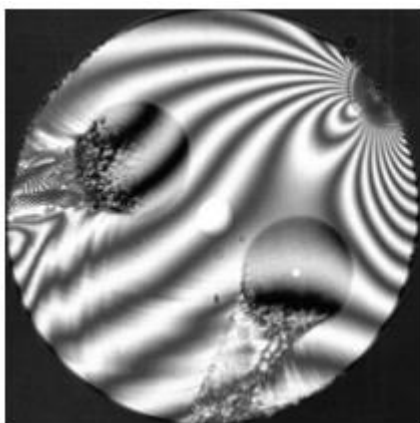
The interferometric inspection system (STAR-VFI-xxxx) specifically designed for checking the surface quality and flatness of your cleaved or polished fibers. The VFI interferometer has proved itself in Research, Production and QA over and over and the feedback we get from users indicates that they value these features:

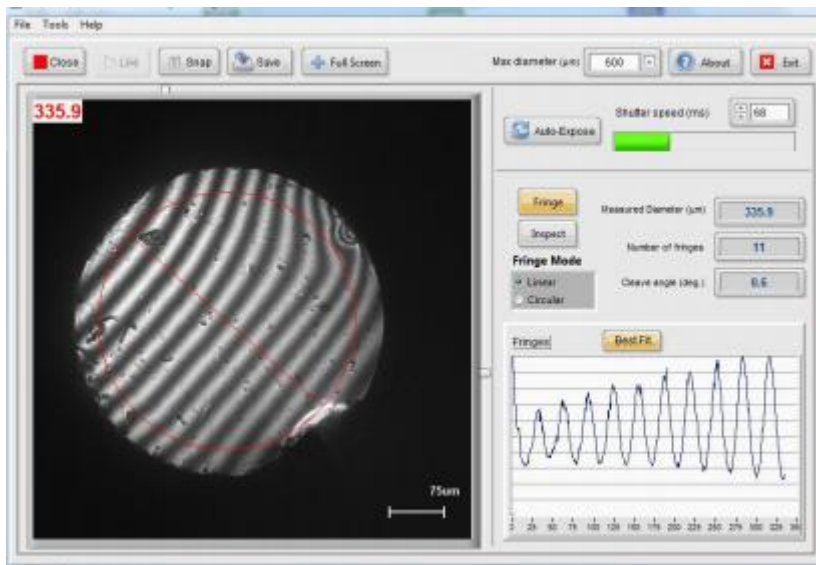
Features & Benefits

- Accepts 125 to 1200 μ m fiber diameters
- 5Mpixel camera gives x6 digital zoom
- Arden, Fujikura/AFL, Vytran and Furakawa/FITEL holders
- End angle/radius of curvature estimation
- Inspect and Fringe modes
- Flat and angled ends
- User calibration facility

Applications

- Precision cleaver manufacture
- Cleaver maintenance
- Laser manufacture
- Medical device manufacturing
- Fiber R&D n Development and testing of angled cleaves and cleavers
- Device pigtailling





Specifications

	STAR-VFI-200	STAR-VFI-1200	STAR-VFI-2000
Field of View	200μm	1200μm maximum with x1.5, x2, x3, and x6 digital zoom	2000μm maximum with x1.5, x2, x3, and x6 digital zoom
Dimensions	240mm(W)x240mm(D) x90mm(H)		
Weight	2.0kg		
Image Sensor	1/1.8 inch CMOS array, 12bit, 6.4MP		
Effective Pixels	2076x2076, 2.4μm square pixels		
Fringe Resolving Power	2μm/fringe		
Max frame rate	> 20 fps		
LED wavelength	587nm		
Accuracy up to 2 deg	< 0.1 deg		
Accuracy up to 10 deg	< 0.2 deg		
Image Format	12-bit png		
Connection to computer	USB 3.0 (USB Type C to USB type A: 1m cable)		
Power Supply	12V in-line power supply		
Operating Temp.	0°C to + 50°C		
Humidity	5%- 95% relative, non-condensing		
Operating systems	Windows7/8/10 64bit only		
Hardware	2GB RAM; USB 3.0 port; 64bit		

Ordering Information

Part number	Description
STAR-VFI-200	Interferometric inspection system for fibers with diameters of 125μm. Includes STAR-VFI-200 optical unit; STAR-VFI-H0 fiber holder for 125μm fibers; PC software; USB cable; power supply. Computer not included.
STAR-VFI-1200	Interferometric inspection system for fibers with diameters from 125 to 1200μm. Includes STAR-VFI-1200 optical unit; STAR-VFI-H0/0400 fiber holder for 400μm fibers; STAR-VFI-FTK400 fiber samples; PC software; USB cable; power supply. Computer not included.
STAR-VFI-2000	Interferometric inspection system for fibers with diameters from 400 to 2000μm. Includes STAR-VFI-2000 optical unit; STAR-VFI-H0/0400 fiber holder for 400μm fibers; STAR-VFI-FTK400 fiber samples; PC software; USB cable; power supply. Computer not included.

Options

Options	Description
STAR-VFI-H0	fiber holder for 125µm fiber, perpendicular cleave
STAR-VFI-H0-200	fiber holder for 200µm fiber, perpendicular cleave
STAR-VFI-H0-400	fiber holder for 400µm fiber, perpendicular cleave
STAR-VFI -H0-600	fiber holder for 600µm fiber, perpendicular cleave
STAR-VFI -H0-800	fiber holder for 800µm fiber, perpendicular cleave
STAR-VFI -H0-1000	fiber holder for 1000µm fiber, perpendicular cleave
STAR-VFI -H0-1250	fiber holder for 1250µm fiber, perpendicular cleave
STAR-VFI -H0-1500	fiber holder for 1500µm fiber, perpendicular cleave
STAR-VFI -H0-2000	fiber holder for 2000µm fiber, perpendicular cleave
STAR-VFI -H0-1250F	fiber holder for 1.25mm ferrules
STAR-VFI -H0-1500F	fiber holder for 2.5mm ferrules
STAR-VFI -H0-2000F	fiber holder for 3.2mm ferrules
STAR-VFI -H-Angle	angle inducing anulus for measuring cleave angles from 4° – 12°
STAR-VFI -MPS	VFI mounting plate for standard Arden Photonics VFI holders
STAR-VFI -MPF	VFI mounting plate for 125µm Fujikura style fiber holders (also works with FGC holders)
STAR-VFI -MPFL	VFI mounting plate for 200µm+ Fujikura style fiber holders (also works with FGC holders)
STAR-VFI -CC-01	Rigid carrying case for STAR-VFI-200, STAR-VFI-1200, STAR-VFI-2000
STAR-VFI -UEW2	extended warranty covering parts and labour for 2 years from purchase, return to base. Cover excludes camera.
STAR-VFI -UEW3	extended warranty covering parts and labour for 3 years from purchase, return to base. Cover excludes camera.
STAR-VFI -UEW3	extended warranty covering parts and labour for 4 years from purchase, return to base. Cover excludes camera.
STAR-VFI -UEW5	extended warranty covering parts and labour for 5 years from purchase, return to base. Cover excludes camera.
STAR-VFI -FTK400	fiber samples, 400µm diameter, for checking STAR-VFI-1200 alignment and calibration

Encircled flux meter



Encircled Flux is now widely accepted as the preferred way to specify modal filling by IEEE, TIA and IEC. Measurement of Encircled Flux is defined in FOTP-203 – the “Modal Explorer” is the most standards-compliant measurement system available today and has been chosen by major standards labs in the USA and Europe as the basis for their critical measurements

Its compact size and solid design make it the tool of choice in cable makers, fiber optic instrument companies and VCSEL, laser and LED source makers. In use in factories every day, major players in the industry rely on the Modal Explorer. The Modal Explorer is available for measurements at 850 and 1300nm as well as other custom wavelengths. Modal Explorer makes measurement of Encircled Flux easy and accurate, and it complies with international standards.

But if you are measuring laser-based transmission light sources for multi-mode systems you may need to use a test jumper assembly and fiber shaker in order to avoid “speckle”. Industry standards, for example IEEE 802.3aq and FOTP–203, call for the use of a mechanical fiber shaker. The Fiber Shaker (MPX-SR3 option) reduces speckle by changing the differential path length of the modes in the fiber. The fiber is shaken continuously to allow the speckle to be averaged out. This will ensure sufficient repeatability for the measurement of the Encircled Flux

Features & Benefits

- End face inspection mode with focus indicator to give better repeatability from operator to operator
- Power monitor - optimize light throughput and modal conditions simultaneously
- Real-time measurement - adjust modal conditions easily as well as increase productivity
- Internal LED with fully filled launch condition
- USB2.0 connection gives portability - with the optional carrying case plus a laptop computer
- Optional geometrical calibration artefact to enable user calibration of MPX
- API software control feature designed for use in the production environment

Applications

- Source and patchcord characterization for IEC11801 and TIA/EIA568 LAN testing
- VCSEL characterization for Gigabit Ethernet IEEE 802.3
- Mode-scrambler and mode-filter characterization
- Connector inspection n Measure sources to IEC 61280-4-1
- Alignment of pig-tailed light sources



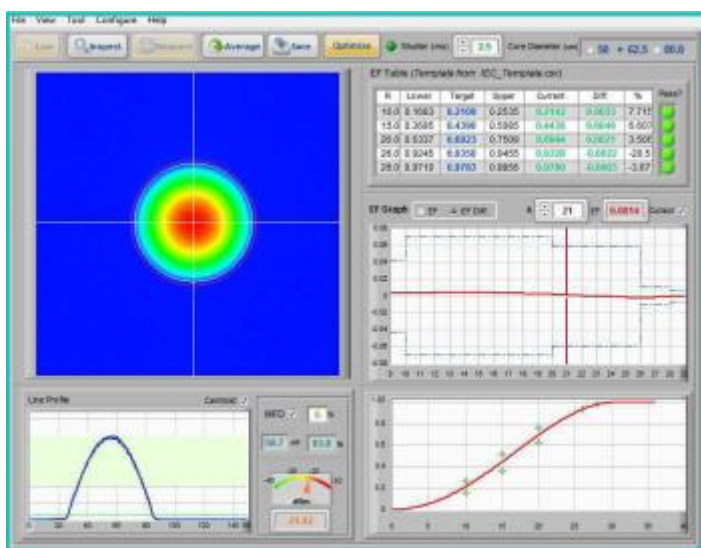
MPX Geometrical Calibration Artefact (Optional)

MPX-CP01



MPX-2 in Carrying Case (Optional)

MPX-CC-02



Specifications

	STAR-MPX-1	STAR-MPX-2
Wavelength	850nm (Encircled Flux measurement range is from 400nm to 1100nm but End Face Inspector and Focussing is at 850nm)	1300nm (Encircled Flux measurement range is from 900nm to 1700nm but End Face Inspector and Focussing is at 1300nm)
Size	260mm(W)x270mm(D)x90mm(H) 10"(W)x10.5"(D)x3.5"(H)	260mm(W)x390mm(D)x110mm(H) 10"(W)x15"(D)x4.5"(H)
Weight	2.5kg / 5.5lb	7.0kg / 15.5lb
Dynamic Range	60dB	>60dB
Image Sensor	CCD array, 12 bit, 4.65µm square pixels	InGaAs array, 12 bit, 30µm square pixels
Maximum Core Diameter	110µm	110µm
Maximum source power	Approx 10mW (depends on power density, fiber type etc.)	Approx 10mW (depends on power density, fiber type etc.)
Input connector adaptors available	Universal 2.5mm ferrule; LC (both supplied as standard), FC, ST, SC, MTP, Bare fiber (optional)	Universal 2.5mm ferrule; LC (both supplied as standard), FC, ST, SC, MTP, Bare fiber (optional)
End Face Inspection and Focussing	850nm LED	1300nm LED
Built in reference source	850nm LED, FC connector, over-filled (110µm core diameter,; 0.37NA)	1300nm LED, FC connector, over-filled (110µm core diameter,; 0.37NA)

Power	External switched mode power supply (supplied)	External switched mode power supply (supplied)
Connection to Computer	USB 2.0 (USB B to USB A: 2m cable supplied)	USB 2.0 (USB B to USB A: 3m cable supplied)
Computer Requirements (minimum)	2GB RAM; USB 2.0 port – note system will not work with USB 3.0	2GB RAM; USB 2.0 port – note system will not work with USB 3.0
Operating System supported	Windows7/8/10 32bit or 64bit	Windows7/8/10 32bit or 64bit
Operating Temperature	0°C to + 50°C	0°C to + 50°C
Humidity	5%- 95% relative, non-condensing	5%- 95% relative, non-condensing

Ordering Information

Part number	Description
MPX1	MPX-1 system for modal analysis of multimode fibers at 850nm, including optical unit, cables, software package and user manual. System is supplied with a universal 2.5mm connector adaptor and an LC connector adaptor. Computer not included. See product specification for information about computer configuration.
MPX2	MPX-2 system for modal analysis of multimode fibers at 1300nm, including optical unit, cables, software package and user manual. System is supplied with a universal 2.5mm connector adaptor and an LC connector adaptor. Computer not included. See product specification for information about computer configuration

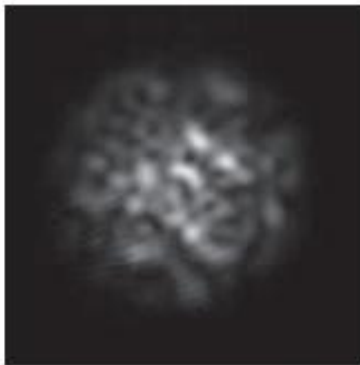
Options

Option	Description
MPX-API	MPX API software add on, designed for accessing and controlling the MPX for automated testing (additional license required)
MPX-CC-01	Rigid carrying case for MPX-1
MPX-CC-02	Rigid carrying case for MPX-2
MPX-CP01	Chrome-on-Glass calibration artefact and software package for MPX-1 and MPX-2 to enable user calibration traceable to NPL standards. Includes Chrome-on-Glass artefact, software CD and operation instructions
MPX-CAU250	Input connector adaptor for 2.5mm diameter ferrule connectors, universal (supplied as standard with MPX-1 and MPX-2)
MPX-CALC	Input connector adaptor for LC connectors (supplied as standard with MPX-1 and MPX-2)
MPX-CAFC	Input connector adaptor for FC connectors
MPX-CAFC/APC	Input connector adaptor for FC/APC connectors
MPX-CASC	Input connector adaptor for SC connectors
MPX-CASC/APC	Input connector adaptor for SC/APC connectors
MPX-CAST	Input connector adaptor for ST connectors
MPX-CAMTP	Input connector adaptor for MTP connectors
MPX-CAMTRJ	Input connector adaptor for MTRJ connectors
MPX-CAU250/APC	Input connector adaptor for 2.5mm diameter ferrule APC connectors, universal
MPX-SR3***	Fiber shaker with 2 fibers (1 x OM1 and 1 x OM2); FC/PC connectors on input and output. ***See the description on the next page
MPX-UEW3	MPX extended warranty covering parts and labour for 3 years from purchase, return to base. Cover excludes camera
APL-LC	Laptop computer, pre-installed with application software
APL-DC	Desktop computer, pre-installed with application software

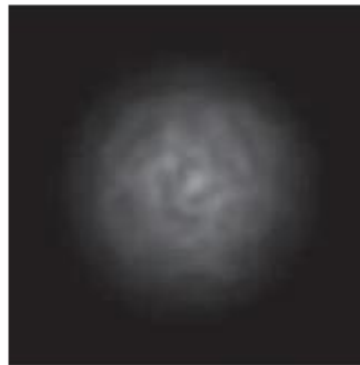
Fiber shaker (**see option MPX-SR3)



- Smaller size (same as MPX)
- Dual fiber inputs: OM1 and OM2
- Low noise
- Light weight
- Shake frequency of 10Hz



Light source output without shaker



Light source output with Shaker

Fiber types	OM1 (62.5/125 GI) and OM2 (50/125 GI)
Input & Output Connectors	FC/PC
Frequency of shaking	10Hz
Insertion loss	<1dB
Size	260mm(W)x270mm(D)x90mm(H)
Weight	1.9kg
Power	External switched mode power supply. Requirements: 90-240V, <500mA, <50W
Operating Temperature	+5°C to +40°C
Storage Temperature	-10°C to +50°C

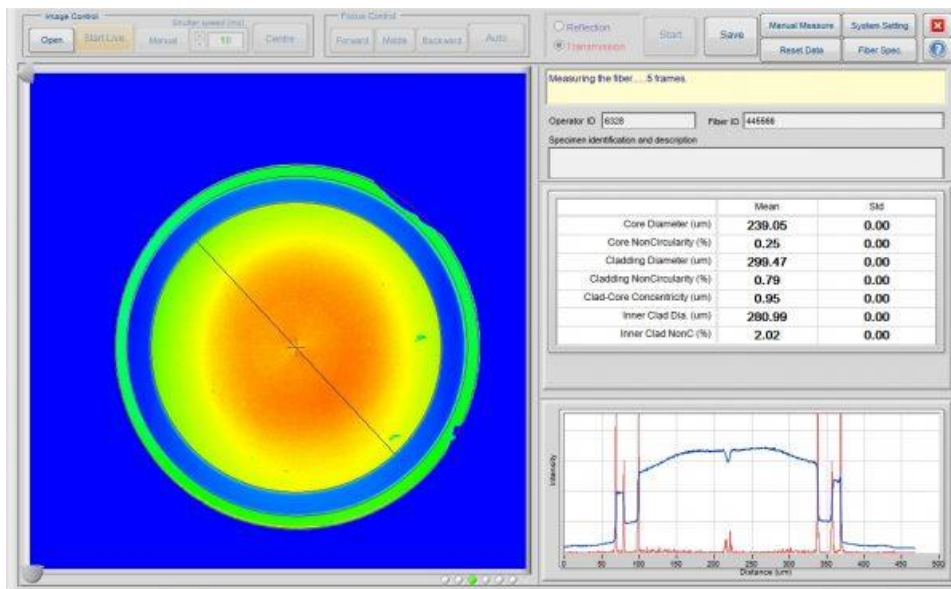
Fiber Glass Geometry Measurement System



The FGC range is the complete solution for measuring the dimensions of standard and specialty fiber in both production and R&D environments. FGC-GT – fiber glass geometry for fibers up to 400 μm diameter. FGC-GS – fiber glass geometry for fibers up to 1000 μm diameter.

Darkfield Illumination

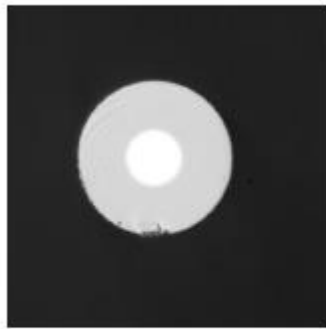
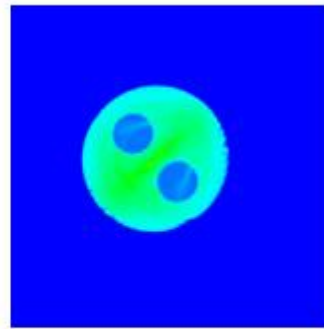
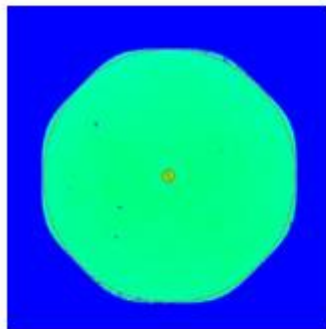
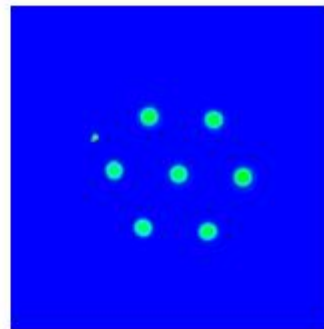
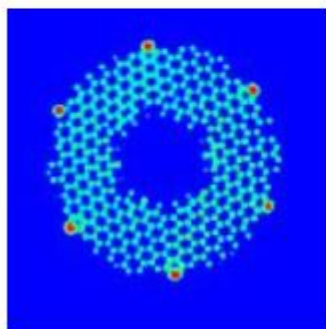
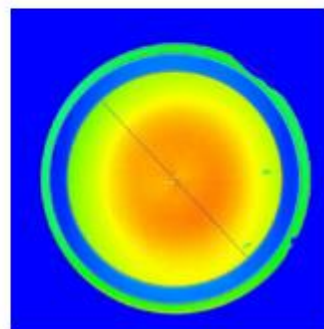
The darkfield illumination system allows the software to show a clear live image of the end face of the fiber by illuminating the end face of the fiber and imaging the reflected light. This allows users to inspect the end face of the fiber whilst taking geometry measurements. The darkfield method of fiber geometry measurement is supported by both NPL in the UK and NIST in the USA.



The FGC comes with an efficient software package containing controls to switch between reflection and transmission mode. This allows users to quickly and easily get both core and cladding geometry measurements including diameter, non-circularity and concentricity. The software contains measurement templates for all standard telecoms fibers, however users can also create their own. This allows the measurement of many special fiber types including dual clad fiber, bend insensitive fiber, multicore fibers and many more.

Features & Benefits

- Measures the widest range of fiber sizes and types – single unit solution means less bench space, reduced training
- Standards compliant – calibrated to international standards, ensuring confidence in its accuracy
- Production ready – reliable, repeatable, operator-independent results in seconds

Fiber Gallery

 <<
Standard

 <<
PM

 <<
Octagonal

 <<
Multicore

 <<
Micro-Structured

 <<
Dual Clad
Specifications

	FGS-GT*		FGC-GS**
Optical			
Max field of View	600 μm		1200 μm
Fiber Illumination – Reflection	Darkfield illumination, 850nm LED		
Fiber Illumination - Transmission	Multiple LED array, 850nm		
Repeatability	Single mode	Multi mode	Multi mode
Core Diameter	< 0.05 μm	< 0.08 μm	< 0.1 μm
Cladding Diameter	< 0.05 μm	< 0.05 μm	< 0.25 μm
Core Non-circularity	< 1.0%	< 0.5%	< 0.05%
Cladding Non-circularity	< 0.1%	< 0.1%	< 0.1%
Core-to-Cladding Concentricity	< 0.06 μm	< 0.05 μm	< 0.05 μm
Measurement Capability			
Measurement Time	< 10 seconds (excluding fiber prep)		
Fiber Diameter	Up to 400 μm		Up to 1000 μm
Special Fibers	Dual clad, octagonal, PM, Multicore, PCF, etc.		
Physical			

Weight	11kg (with carry case 33kg)
Size	0.5 x 0.5 x 0.2
Operating Temp	0°C to + 50°C
Humidity	5%- 95% relative, non-condensing
Computer Requirements	All FGC systems are supplied with a desktop computer running up-to-date windows operating system
Data Interface	2 x USB3.0 (USB B to USB A: 2m cable supplied)

* Repeatability is measured on the FGC-GT using a single 125 μm fiber without removing it from the unit, the repeatability specifications are only applicable to OM1, OM2 and singlemode fibers.

** Repeatability is measured on the FGC-GS using a single 540/600 μm fiber without removing it from the unit

Ordering Information

Part number	Description
FGC-GT	Fiber Glass Geometry System for measurement of optical fibers with diameters up to 400 μm . Including optical unit, fiber handling bench, cables, software package; desktop computer; pair of Arden holders suitable for 250 μm diameter coated fiber.
FGS-GS	Fiber Glass Geometry System for measurement of optical fibers with diameters up to 1000 μm . Including optical unit, fiber handling bench, cables, software package; desktop computer; pair of Arden holders suitable for 400 μm diameter coated fiber.
FG-H-250	Pair of Arden FGC fiber holders with 250 μm V-groove, suitable for 250 μm diameter coated fiber
FG-H-400	Pair of Arden FGC fiber holders with 400 μm V-groove, suitable for 400 μm diameter coated fiber
FG-H-600	Pair of Arden FGC fiber holders with 600 μm V-groove, suitable for 600 μm diameter coated fiber
FG-H-800	Pair of Arden FGC fiber holders with 800 μm V-groove, suitable for 800 μm diameter coated fiber
FG-H-1000	Pair of Arden FGC fiber holders with 1000 μm V-groove, suitable for 1000 μm diameter coated fiber
FG-H-CUST	Pair of Arden FGC fiber holders with customer defined V-groove diameter
FGC-GUEW3	FGC-Glass geometry system, extended warranty covering parts and labour for 3 years from purchase, return to base. Cover excludes camera.
FGC-GUEW5	FGC-Glass geometry system, extended warranty covering parts and labour for 5 years from purchase, return to base. Cover excludes camera.
FGC-PMI	PM illuminator designed for use with the FGC

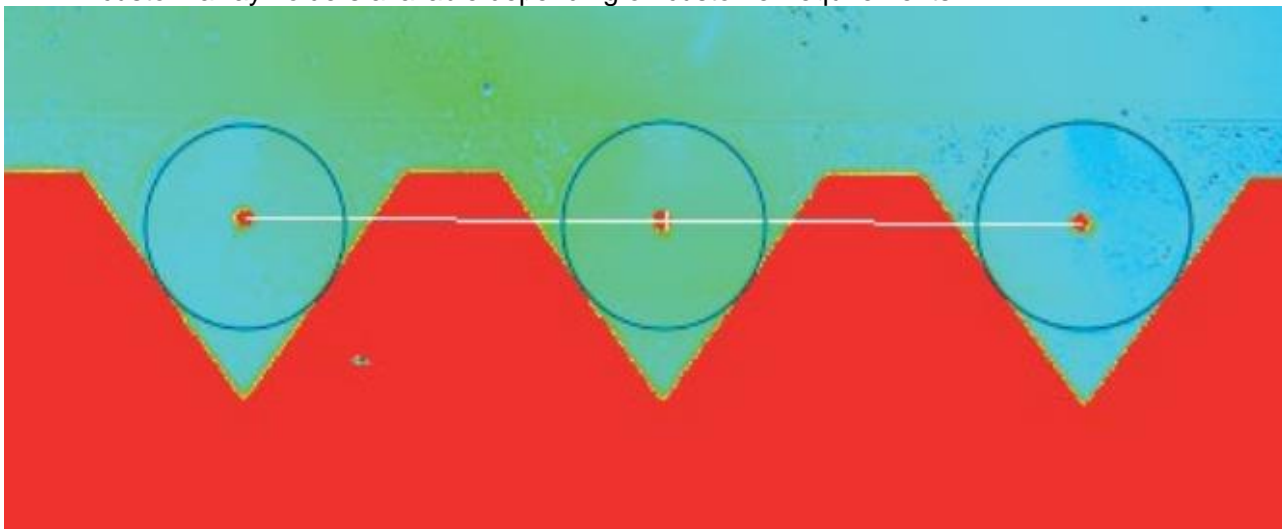
FGC-GA Array Geometry Measurement System



The FGC-GA is the ultimate solution for measurement and process control for V-groove array production. With one unit, users can measure V-groove block geometry, core-to-core pitch and core X & Y offset of multifiber arrays up to 15mm in width. With a 1200 μm field of view as well as an automated lateral stage for scanning along the entire width of the array, the FGC-GA is the fastest and most flexible way to produce top quality V-groove arrays

Features and Benefits

- Measurement of core to core pitch, X-offset, Y-offset and V-groove block geometry.
- Lateral adjustment stage and image stitching for measurement over a 15mm array width.
- Flexible software can adjust for different fiber types (SM, PM, MM).
- 1200µm field of view allows simultaneous measurement of up to 4 cores, decreasing overall measurement time.
- custom array holders available depending on customer requirements.



Specifications

Optical	Optical FGC-GA Repeatability Core X/Y-offsets* < 0.1 µm Core-core Distance* < 0.1 µm Measurement Capability Measurement Time < 1 minute (excluding fiber preparation) for a 3-fiber array Array Width Up to 15mm Fiber Types Singlemode, Multimode, PM Physical Weight 13kg (with carry case 44kg) Size 0.5m x 0.5m x 0.2m Operating Temperature 0 – 50° C Humidity 5% – 95%, relative, non-condensing Data Interface 3 X USB 3.1 (USB B to USB A: 0.5m cable supplied) Computer Requirements All FGC systems are supplied with a desktop computer running up-to-date Windows operating system
Max Field of View	1200µm
Fiber Illumination – Reflection	Multichannel 525nm
Fiber Illumination – Transmission	Darkfield illumination, 525nm LED

ODTR Launch boxes

When measuring fiber optic cables using an OTDR, a launch box (also known as a Dead Zone Eliminator) helps to minimize the effects of the OTDR's launch pulse thus improving the accuracy of the measurement. Our high quality launch boxes come in three different housing formats:

- 1) Rugged "PELI" boxes versions are airtight, watertight and incredibly tough. These military approved cases are IP65 rated and are used in the harshest environments. Select this version if you want the best protection for your lead-in fiber.
- 2) Aluminium "EuroCard" enclosure is smaller, lighter than the PELI case offering an ideal solution for factory or lab environments where space is at a premium.
- 3) ABS "Midi" style enclosure is slightly larger than the "Euro" for longer fiber lengths.

We can supply a range of products in different fiber types including versions with "ModCon" mode control to enable your OTDR to meet the Encircled Flux launch condition requirement in IEC 61280-4-1. All our boxes come with a full test certificate and 1 year warranty (except damaged connectors) We offer a standard range of products but we also have the capability to make custom solutions to your precise requirements.

Features & Benefits

- Improve OTDR measurement accuracy
- Available with "ModCon" Launch conditioning to allow compliance with EF requirements of IEC 61280-4-1
- Rugged carrying case for long lifetime in field or factory
- Available in 09/125SM, 50/125MM, 62.5/125MM
- Custom configurations available
- User replaceable input and output leads (fusion splicer required) for long life time
- High quality components e.g. Draka PCVD GIMM fiber

Applications

- OTDR testing in field or factory
- Remove the "dead zone" from OTDR measurements
- Calibration comparison for OTDR measurements
- Long haul system loop back for field testing transmissions

Specification

	"PELI" style	"Midi" style	"EuroCard" style
Size	232 x 192 x 111 mm 9.25 x 7.75 x 4.5 in	155 x 240 x 35 mm 6.0 x 9.5 x 1.45 in	166 x 105 x 33 mm 6.5 x 4.1 x 1.3 in
Weight	1.3 kg (3.0 lb)	0.5kg (1.1 lb)	0.5kg (1.1 lb)
Operating temperature	-40 to +55 C	0 to +40 C	0 to +40 C
Typical loss	< 0.5dB @ 1310nm with 1km sm fiber	< 0.5dB @ 1310nm with 1km sm fiber	< 1.0dB @ 1310nm with 200m mm fiber
Input and output lead length	1m	1m	1m



Ordering information

We offer OTDR launch boxes in several standard configurations:

OTDR lead-in boxes in “PELI” case – singlemode

Part number	Description
ALB-09-0500-FC/FC-P	OTDR lead-in box, containing 500m of 09/125 fiber with FC connectors, in “Peli” case.
ALB-09-0500-FCAPC/FCAPC-P	OTDR lead-in box, containing 500m of 09/125 fiber with FCAPC connectors, in “Peli” case.
ALB-09-0500-SC/SC-P	OTDR lead-in box, containing 500m of 09/125 fiber with SC connectors, in “Peli” case.
ALB-09-0500-SCAPC/SCAPC-P	OTDR lead-in box, containing 500m of 09/125 fiber with SCAPC connectors, in “Peli” case.
ALB-09-1000-FC/FC-P	OTDR lead-in box, containing 1000m of 09/125 fiber with FC connectors, in “Peli” case.
ALB-09-1000-FCAPC/FCAPC-P	OTDR lead-in box, containing 1000m of 09/125 fiber with FCAPC connectors, in “Peli” case.
ALB-09-1000-SC/SC-P	OTDR lead-in box, containing 1000m of 09/125 fiber with SC connectors, in “Peli” case.
ALB-09-1000-SCAPC/SCAPC-P	OTDR lead-in box, containing 1000m of 09/125 fiber with SCAPC connectors, in “Peli” case.
ALB-09-2000-FC/FC-P	OTDR lead-in box, containing 2000m of 09/125 fiber with FC connectors, in “Peli” case.
ALB-09-2000-FCAPC/FCAPC-P	OTDR lead-in box, containing 2000m of 09/125 fiber with FCAPC connectors, in “Peli” case.

ALB-09-2000-SC/SC-P	OTDR lead-in box, containing 2000m of 09/125 fiber with SC connectors, in "Peli" case.
ALB-09-2000-SCAPC/SCAPC-P	OTDR lead-in box, containing 2000m of 09/125 fiber with SCAPC connectors, in "Peli" case.

OTDR lead-in boxes in "MIDI" case – singlemode

Part number	Description
ALB-09-0500-FC/FC-M	OTDR lead-in box, containing 500m of 09/125 fiber with FC connectors, in "MIDI" case.
ALB-09-0500-FCAPC/FCAPC-M	OTDR lead-in box, containing 500m of 09/125 fiber with FCAPC connectors, in "MIDI" case.
ALB-09-0500-SC/SC-M	OTDR lead-in box, containing 500m of 09/125 fiber with SC connectors, in "MIDI" case.
ALB-09-0500-SCAPC/SCAPC-M	OTDR lead-in box, containing 500m of 09/125 fiber with SCAPC connectors, in "MIDI" case.
ALB-09-1000-FC/FC-M	OTDR lead-in box, containing 1000m of 09/125 fiber with FC connectors, in "MIDI" case.
ALB-09-1000-FCAPC/FCAPC-M	OTDR lead-in box, containing 1000m of 09/125 fiber with FCAPC connectors, in "MIDI" case.
ALB-09-1000-SC/SC-M	OTDR lead-in box, containing 1000m of 09/125 fiber with SC connectors, in "MIDI" case.
ALB-09-1000-SCAPC/SCAPC-M	OTDR lead-in box, containing 1000m of 09/125 fiber with SCAPC connectors, in "MIDI" case.
ALB-09-2000-FC/FC-M	OTDR lead-in box, containing 2000m of 09/125 fiber with FC connectors, in "MIDI" case.
ALB-09-2000-FCAPC/FCAPC-M	OTDR lead-in box, containing 2000m of 09/125 fiber with FCAPC connectors, in "MIDI" case.
ALB-09-2000-SC/SC-M	OTDR lead-in box, containing 2000m of 09/125 fiber with SC connectors, in "MIDI" case.
ALB-09-2000-SCAPC/SCAPC-M	OTDR lead-in box, containing 2000m of 09/125 fiber with SCAPC connectors, in "MIDI" case.

OTDR lead-in boxes in "PELI" case – multimode

Part number	Description
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ALB-50-100-SC/SC-P	OTDR lead-in box, containing 100m of 50/125 multimode fiber with SC connectors, in "Peli" case.
ALB-50-100-SC/SC-P-MC	OTDR lead-in box, containing 100m of 50/125 multimode fiber with SC connectors, in "Peli" case. With "ModCon" mode controller.
ALB-50-250-SC/SC-P	OTDR lead-in box, containing 250m of 50/125 multimode fiber with SC connectors, in "Peli" case.
ALB-50-250-SC/SC-P-MC	OTDR lead-in box, containing 250m of 50/125 multimode fiber with SC connectors, in "Peli" case. With "ModCon" mode controller.
ALB-50-500-SC/SC-P	OTDR lead-in box, containing 500m of 50/125 multimode fiber with SC connectors, in "Peli" case.
ALB-50-500-SC/SC-P-MC	OTDR lead-in box, containing 500m of 50/125 multimode fiber with SC connectors, in "Peli" case. With "ModCon" mode controller.
ALB-62-100-SC/SC-P	OTDR lead-in box, containing 100m of 62.5/125 multimode fiber with SC connectors, in "Peli" case.
ALB-62-100-SC/SC-P-MC	OTDR lead-in box, containing 100m of 62.5/125 multimode fiber with SC connectors, in "Peli" case. With "ModCon" mode controller.
ALB-62-250-SC/SC-P	OTDR lead-in box, containing 250m of 62.5/125 multimode fiber with SC connectors, in "Peli" case.
ALB-62-250-SC/SC-P-MC	OTDR lead-in box, containing 250m of 62.5/125 multimode fiber with SC connectors, in "Peli" case. With "ModCon" mode controller.
ALB-62-500-SC/SC-P	OTDR lead-in box, containing 500m of 62.5/125 multimode fiber with SC connectors, in "Peli" case.
ALB-62-500-SC/SC-P-MC	OTDR lead-in box, containing 500m of 62.5/125 multimode fiber with SC connectors, in "Peli" case. With "ModCon" mode controller.

OTDR lead-in boxes in "EuroCard" enclosure – multimode

Part number	Description
ALB-50-100-SC/SC-E	OTDR lead-in box, containing 100m of 50/125 multimode fiber with SC connectors, in "EuroCard" case.

ALB-50-100-SC/SC-E-MC	OTDR lead-in box, containing 100m of 50/125 multimode fiber with SC connectors, in "EuroCard" case. With "ModCon" mode controller.
ALB-50-250-SC/SC-E	OTDR lead-in box, containing 250m of 50/125 multimode fiber with SC connectors, in "EuroCard" case.
ALB-50-250-SC/SC-E-MC	OTDR lead-in box, containing 250m of 50/125 multimode fiber with SC connectors, in "EuroCard" case. With "ModCon" mode controller.
ALB-50-500-SC/SC-E	OTDR lead-in box, containing 500m of 50/125 multimode fiber with SC connectors, in "EuroCard" case.
ALB-50-500-SC/SC-E-MC	OTDR lead-in box, containing 500m of 50/125 multimode fiber with SC connectors, in "EuroCard" case. With "ModCon" mode controller.
ALB-62-100-SC/SC-E	OTDR lead-in box, containing 100m of 62.5/125 multimode fiber with SC connectors, in "EuroCard" case.
ALB-62-100-SC/SC-E-MC	OTDR lead-in box, containing 100m of 62.5/125 multimode fiber with SC connectors, in "EuroCard" case. With "ModCon" mode controller.
ALB-62-250-SC/SC-E	OTDR lead-in box, containing 250m of 62.5/125 multimode fiber with SC connectors, in "EuroCard" case.
ALB-62-250-SC/SC-E-MC	OTDR lead-in box, containing 250m of 62.5/125 multimode fiber with SC connectors, in "EuroCard" case. With "ModCon" mode controller.
ALB-62-500-SC/SC-E	OTDR lead-in box, containing 500m of 62.5/125 multimode fiber with SC connectors, in "EuroCard" case.
ALB-62-500-SC/SC-E-MC	OTDR lead-in box, containing 500m of 62.5/125 multimode fiber with SC connectors, in "EuroCard" case. With "ModCon" mode controller.

Other configurations available on application

Reference Fiber Optic Cables

We can supply a wide range of reference patchcords for use as the launch point for optical system testing. These patchcords are made to the highest tolerances to give you consistent measurement data.

Features & Benefits

- Innovative – unusual combinations of connectors, fibers and cables
- Reliable – 100% testing of insertion loss, return loss, end face geometry and surface finish
- High Performance – low insertion loss/high return loss/ custom wavelengths

Connectors

Connectors	E-2000	FC	LC	SC	SMA	ST	Military termini
Polish	UPC APC	UPC APC	UPC APC	UPC APC	IPC	UPC	UPC
Type	Push pull	Screw on	Push pull	Push pull	Screw on	Bayonet	Insert

Fibers

Fibre	SMF-28E	PM 850	PM 1300	PM 1550	SX + laser optimised	Infinicor 600	Infinicor 300
Mode field (Core) diameter (μm)	8.2	6.6	9.5	10.5	50	50	62.5
Wavelength (nm)	1310 1550	980 1060	1300	1550	850 1300	850 1300	850 1300
Attenuation (dB/km)	0.35 0.22	3.0	1.0	0.5	2.4 0.8	2.5 0.8	3.0 0.7
Numerical Aperture	0.14	0.14	0.14	0.14	0.20	0.20	0.275

Cables

OD	900um tight	900um loose	1.6mm PVC	1.6mm steel	3mm PVC tight	3mm PVC loose
Jacket material	PVC	Hytrel (nylon) or PTFE (Teflon)	PVC	Stainless steel	PVC	PVDF + PVC

Strength member	–	–	Kevlar	Stainless steel	Kevlar	Kevlar
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Performance

Fibre	Singlemode	PM	Multimode
Insertion loss (dB)	<0.1	<0.1	<0.05
Return loss (dB)	APC >70 ; PC >55	UPC >55	PC >50
Fibre core eccentricity	<0.5	<0.5	<0.5
Extinction ratio	–	30	–
Radius of curvature (mm)	APC 8 < ROC < 12	APC 8 < ROC < 12	APC 8 < ROC < 12
Apex offset (µm)	<30	<30	<30
Fibre height (protrusion) (nm)	-50 FH < +50	-50 FH < +50	-50 FH < +50