

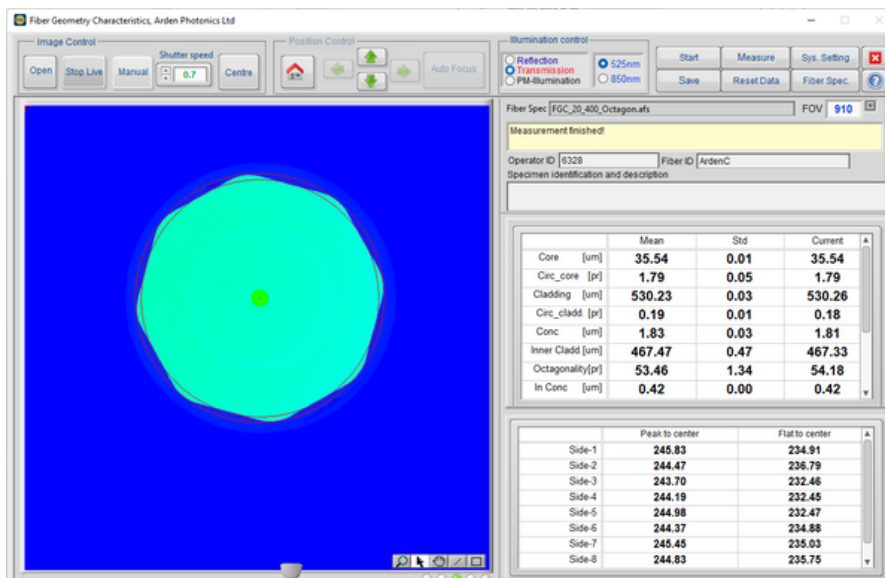
The FGC-G range is the complete solution for measuring the dimensions of standard and specialty fiber in both production and R&D environments.

The FGC-G comes in 2 different models:

- FGC-GT - fiber glass geometry for fibers up to 500 μm diameter
- FGC-GS - fiber glass geometry for fibers up to 800 μm diameter

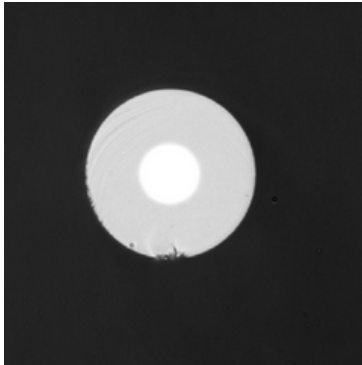
Features & Benefits

- Measures the widest range of fiber sizes and types
 - measure most standard and specialty fibers including PM, square core and octagonal fibers
 - single unit solution means less bench space, reduced training
- Standards compliant
 - calibrated to international standards, ensuring confidence in its accuracy
- Production ready
 - The latest V5.9 software enhances user experience, and ensures reliable, repeatable, operator-independent results in seconds.

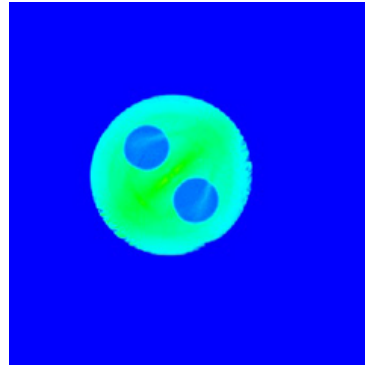


FGC-G software user interface main screen

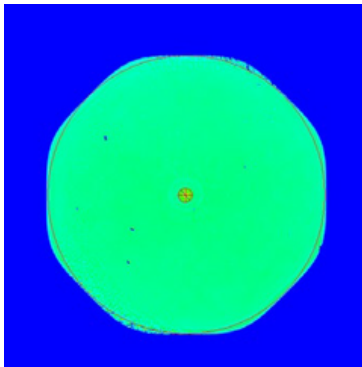
Fiber Gallery



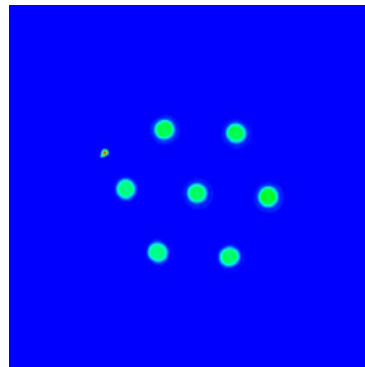
<<
Standard



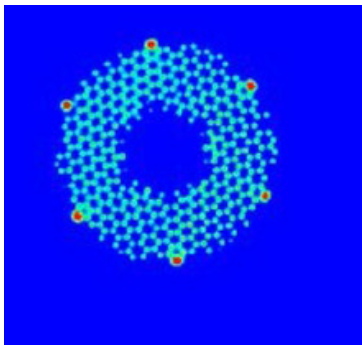
<<
PM



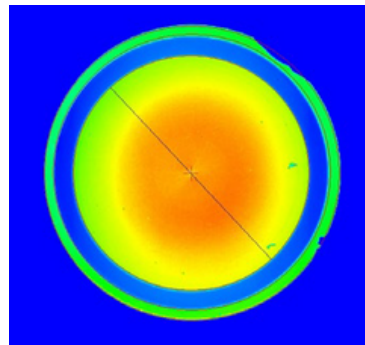
<<
Octagonal



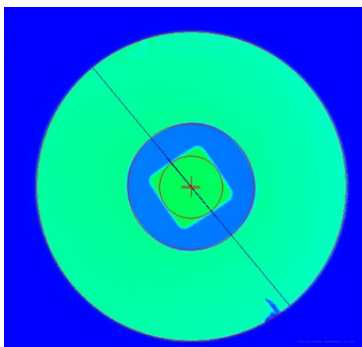
<<
Multicore



<<
Micro-structured



<<
Dual Clad



<<
Square core



FGC-G

Fiber Glass Geometry Measurement System

Technical Specification

Optical	FGC-GT*	FGC-GS**
Max Field of View	600 μm	900 μm
Fiber Illumination - Reflection	Darkfield illumination, 850 nm LED***	Darkfield illumination, 525 nm LED***
Fiber Illumination - Transmission	Multiple LED array, 850 nm***	Multiple LED array, 525 nm***

Repeatability	Singlemode	Multimode	20/400
Core Diameter	< 0.05 μm	< 0.08 μm	< 0.1 μm
Cladding Diameter	< 0.05 μm	< 0.05 μm	< 0.15 μm
Core Non-Circularity	< 1.0%	< 0.5%	< 0.5%
Cladding Non-Circularity	< 0.1%	< 0.1%	< 0.1%
Core-To-Cladding Concentricity	< 0.06 μm	< 0.05 μm	< 0.15 μm

Measurement Capability		
Measurement Time	< 10 seconds (excluding fiber prep)	
Fiber Diameter	up to 500 μm	up to 800 μm
Special Fibers	Dual clad, Octagonal, PM, Multicore, PCF, etc.	

Physical	
Weight	11kg (with carry case 33kg)
Size of FGC unit	0.5 x 0.4 x 0.2 m
Size of fiber handling bench	0.5 x 0.5 x 0.1 m
Operating Temp	10 - 30°C
Computer Requirements	All FGC systems are supplied with a computer running up-to-date Windows OS
Data Interface	1 x USB 3.0 (USB B to USB A: 1m cable supplied)

* Repeatability is measured on the FGC-GT using a single 125 μm fiber without removing it from the unit at 22°C, the repeatability specifications are only applicable to OM1, OM2 and singlemode fibers.

** Repeatability is measured on the FGC-GS using a single 20/400 μm fiber without removing it from the unit at 22°C.

*** May be fitted with dual wavelengths or other customised wavelengths



FGC-G

Fiber Glass Geometry Measurement System

Ordering Information

Part number	Description
FGC-GT	Fiber Glass Geometry System for measurement of optical fibers with diameters up to 500 μm . Including optical unit, fiber handling bench, cables, software package; desktop computer; pair of Arden holders suitable for 250 μm diameter coated fiber.
FGC-GS	Fiber Glass Geometry System for measurement of optical fibers with diameters up to 800 μm . Including optical unit, fiber handling bench, cables, software package; desktop computer; pair of Arden holders suitable for 400 μm diameter coated fiber.

Holders	Description
FG-H-080	Pair of Arden FGC fiber holders with 80 μm V-groove, suitable for 80 μm diameter coated fiber
FG-H-125	Pair of Arden FGC fiber holders with 125 μm V-groove, suitable for 125 μm diameter coated fiber
FG-H-200	Pair of Arden FGC fiber holders with 200 μm V-groove, suitable for 200 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-500	Pair of Arden FGC fiber holders with 500 μm V-groove, suitable for 500 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

Holders	Description
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-850	PM illuminator, 850 nm source, for measuring dimensions of 125 and 80 μm diameter PANDA fibers. Optional plug-in unit for all models of FGC with 850 nm source
FGC-PMI-525	PM illuminator, 525 nm source, for measuring dimensions of 125 and 80 μm diameter PANDA fibers. Optional plug-in unit for all models of FGC with 525 nm source

For North American sales enquiries, call +1 727 504 8748 or email us on sales@ardenphotonics.com
For Rest of World sales enquiries, call +44 (0)121 733 7721 or email us on sales@ardenphotonics.com