



# FGC-GA

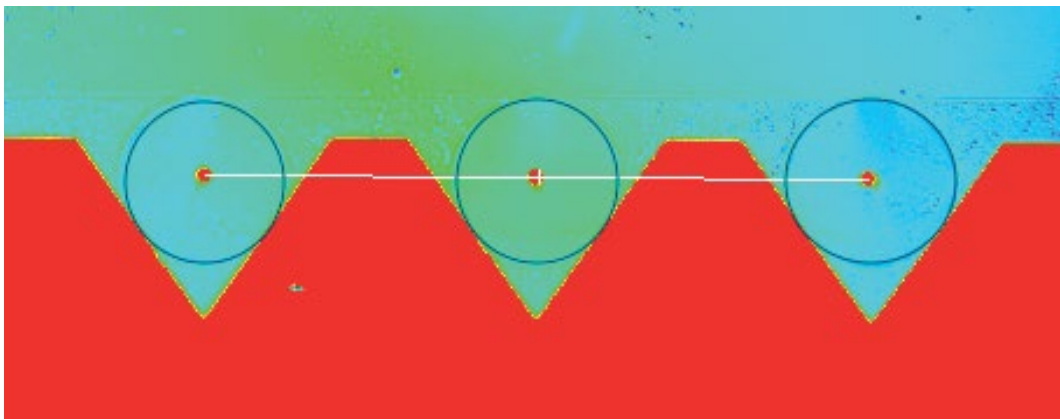
## Array Geometry Measurement System



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 $\mu$ m 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 & 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).
- 1200 $\mu$ m field of view allows simultaneous measurement of up to 4 cores, decreasing overall measurement time.
- Arden Photonics custom array holders available depending on customer requirements.



FGC-GA software display



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## Array Geometry Measurement System

### Technical Specification

Optical	FGC-GA
Max Field of View	1200µm
Fiber Illumination – Reflection	Multichannel 525nm
Fiber Illumination – Transmission	Darkfield illumination, 525nm LED

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

\* Repeatability is measured on the FGC-GA using a single 500µm 3 single mode fiber array without removing it from the unit.

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