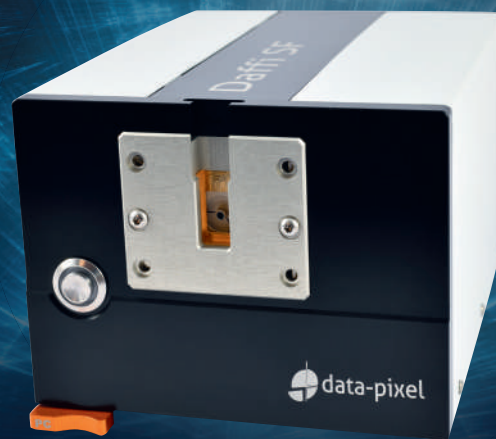


# INTERFEROMETRY



## DAFFI SF

*Digital Automated Fiber & Ferrule Interferometer for Single-Fiber connectors*

The latest interferometer from Data-Pixel is the perfect solution for high volumes production, while ensuring high accuracy and repeatability of the measurements.

Based on our extensive interferometer manufacturing experience we designed the DAFFI SF to be **robust, fast and accurate** in order to meet all manufacturing or laboratory environments.

With the Blink software platform, DAFFI is able to measure the end face geometry on Single-Fiber connectors in a very short time.

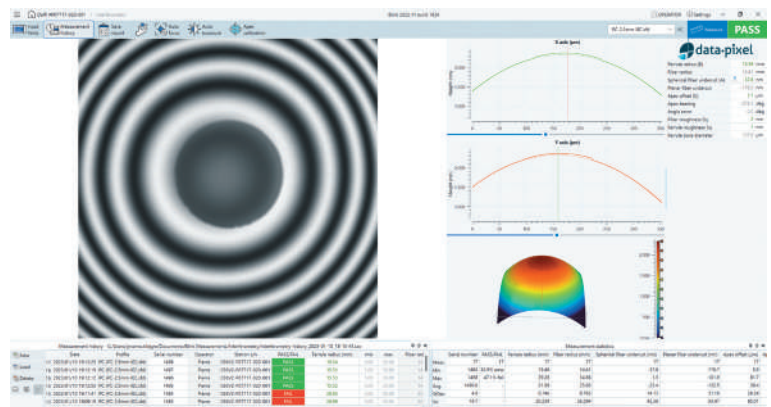
The Daffi SF interferometer accessories (flanges and adapters) are fully compatible with the Daisi range, allowing the user to limit the costs of the 3D geometry measurement units.

### KEY FEATURES :

- Measurement of PC and APC connectors, ferrules and bare fibers
- True phase-shifting interferometer
- Non-contact measurement
- Smart autofocus, focus only when required
- Servo-controlled reference mirror for automatic Apex calibration
- Vibration insensitive
- Easy and fast switching from PC to APC, no change of fiber holder required
- Compliance with Industry Standards for Interferometer Measurements
- Intuitive BLINK software, with data-base connectivity
- Compatible with desktop PC, laptop, tablet PC

### SPECIFICATIONS :

|                                |                   |
|--------------------------------|-------------------|
| Field of view (mm) :           | 1.1 x 0.9         |
| Scan mode :                    | Red light         |
| Radius (mm) :                  | 3 to flat         |
| Apex Offset (µm) :             | 0 to 500          |
| Fiber Height (nm) :            | ± 160             |
| Fiber cleave angle (degrees) : | 0 to 12           |
| Measurement speed (sec.) :     | 1                 |
| Magnification :                | X 300             |
| Outputs :                      | USB 2.0 + USB 3.0 |
| Power source :                 | External 12V      |
| Dimensions H x W x L (mm) :    | 133 x 171 x 244   |
| Weight (kg) :                  | 6.3               |



## Interferometry report

Generated by Blink  Data-Pixel

|                    |                      |               |                      |      |
|--------------------|----------------------|---------------|----------------------|------|
| Date               | 2023-01-10 19:18     | Serial number | 1498                 | PASS |
| Measurement device | Daffi                | Operator      | Pierre               |      |
| Device s/n         | 036V2-P07717-020-001 | Station s/n   | 036V2-P07717-020-001 |      |
| Type               | PC                   |               |                      |      |
| Profile            | PC-2.5mm-IEC.sfd     |               |                      |      |
| Fiber diameter     | 125µm                |               |                      |      |

| Parameter                    | min allowed | max allowed | Measurement result | Pass/Fail |
|------------------------------|-------------|-------------|--------------------|-----------|
| Ferrule radius [B]           | 5 mm        | 30 mm       | 15.54 mm           | PASS      |
| Fiber radius                 | 5 mm        | 30 mm       | 14.41 mm           | IGNORED   |
| Spherical fiber undercut [A] | -100 nm     | 162.9 nm    | -37.8 nm           | PASS      |
| Planar fiber undercut        | -30 nm      | 0 nm        | -176.2 nm          | IGNORED   |
| Apex offset [C]              | 0 µm        | 50 µm       | 7.1 µm             | PASS      |
| Apex bearing                 | -360 °      | 360 °       | 275.1 °            | IGNORED   |
| Angle error                  | -0.5 °      | 0.5 °       | 0 °                | IGNORED   |
| Fiber roughness Sq           | 0 nm        | 50 nm       | 2 nm               | PASS      |
| Ferrule roughness Sq         | 0 nm        | 50 nm       | 1 nm               | PASS      |
| Ferrule bore diameter        | 120 µm      | 130 µm      | 127.3 µm           | IGNORED   |

Blink is a software platform common to all Data-Pixel products. Dedicated plugins support the Interferometry range of products : 3D Scope-V2, Daffi SF, Daisy-V3, Daffi MT and Daisy MT-FP.

PDF, HTML and CSV reporting capability with extensive database support (SQL Server, MySQL, ODBC, ORACLE,...).

OLE automation support is available for dedicated application.

## ORDER OPTIONS :

|                                                         |                              |
|---------------------------------------------------------|------------------------------|
| DAFFI SF unit with Blink Interferometry                 | 70-DFSF-V1-A06-00            |
| Flange 1.25mm                                           | 10-FL-001380                 |
| Flange 1.25mm LC DUPLEX (Uniboot, MDC, SN, standard LC) | 30-FL-003244                 |
| Flange 1.25mm LC DUPLEX (CS, URM P2)                    | 30-FL-002603                 |
| Flange 1.60mm                                           | 30-FL-002382                 |
| Flange 2.00mm                                           | 30-FL-002395                 |
| Flange 2.50mm                                           | 30-FL-001396                 |
| Flange 3.17mm SMA                                       | 30-FL-003224                 |
| Flange for bare fiber                                   | 40-FL-001660                 |
| Adapter 1.25mm LC                                       | 10-AD-001013                 |
| Adapter 1.25mm Duplex                                   | Several references available |
| Adapter 1.25mm MU                                       | 10-AD-000555                 |
| Adapter 2.50mm SC                                       | 10-AD-000552                 |
| Adapter 2.50mm FC Narrow                                | 10-AD-000554                 |
| Adapter 2.50mm FC Wide                                  | 10-AD-000553                 |
| Adapter 2.50mm E2000                                    | 10-AD-000408                 |



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