**3DScope-V2**

**The volume production interferometer for ferrule end-face geometry measurements at entry-level price.**

Data-Pixel is pleased to introduce the 3D-Scope V2 interferometer. The 3D-Scope V2 is our new interferometer specifically designed for use in a production environment. It has been designed with speed, precision, simplicity, robustness and cost in mind.

**Key Features**
- Single unit for measurement of single-fiber, PC and APC ferrules, connectors and bare fibers
- Lightning speed measurement cycle
- PASS/FAIL result visual feedback via front panel start button LED color
- Integrated PC/APC tilt stage, no apex re-calibration required
- True phase-shifting interferometer
- Completely vibration insensitive. Measure while holding system in hand
- Interfaced to laptop computers via USB 2.0
- Compliance with Industry Standards for Interferometer Measurements
- Measure angle of cleaving of bare fibers with great accuracy
- Measurement Report and History Report in HTML format
- Directly export measurement data into any Database
- Low cost!
- Autofocus option

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**DAISI-MT**

**Digital Automated Interferometer for Surface Inspection**

The DAISI-MT interferometer is the industry reference for MT product measurements, based on the same design philosophy that made the DAISI a success. Capable of measuring both single fiber and multi-fiber ferrules. Designed for use in production and field applications.

**Key Features**
- Combined White-Light and Red-Light phase-shifting interferometer
- Closed-loop high precision 30 microns Z-scan
- Vibration insensitive
- Rapid Auto-Focus
- Automatic calibration of reference mirror
- Supports MT-16 and MT-32
- Measures all types of PC/APC Single & Multi-Fiber connectors
- Low heat LED illumination
- Mega-pixel high resolution camera

**Benefits:**
- One interferometer for all your needs
- Up to 100 fibers in a single scan
- Unique Data-Pixel Rapid-Measure software
- Less than 10 seconds measurement for a 12 fibers ferrule
- Suitable for factory and on-site applications
- Portable
- Simple One-button control
- Single Link Cable (USB2.0)

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**Parameter**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Repeatability* / Reproducibility**</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>X &amp; Y angles (°)</td>
<td>0.002 / 0.02</td>
<td>±1° deviation from 0° (PC) or 8° (APC) up to 20</td>
</tr>
<tr>
<td>Fiber Height (microns)</td>
<td>0.005 / 0.015</td>
<td>up to 20</td>
</tr>
<tr>
<td>Measurement Speed (sec. for a 12 fibers ferrule)</td>
<td>8</td>
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<tr>
<td>Autofocus speed (sec)</td>
<td>5</td>
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</tr>
<tr>
<td>Field of View (mm²)</td>
<td>0.67 x 0.53</td>
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<tr>
<td>Lateral Resolution (microns)</td>
<td>configurable 3.3 x 2.7 max.</td>
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<tr>
<td>Wavelength (nm)</td>
<td>White &amp; Red (632 nm) LED</td>
<td></td>
</tr>
<tr>
<td>Power requirements</td>
<td>12V 25VA</td>
<td></td>
</tr>
</tbody>
</table>

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**DAISI-V2**

**Digital Automated Interferometer for Surface Inspection**

The ultimate production interferometer for measuring end-face geometry on single fiber and MT-RJ connectors, equipped with a revolutionary "no-exterior-moving-parts" mechanical design.

**Key Features**
- Single unit for measurement of PC and APC ferrules, connectors and bare fibers
- Fast autofocus
- One-button easy operation
- Servo-controlled reference mirror for automatic Apex calibration
- Automated open/close feature
- No exterior moving parts or adjustment screws
- Apex offset, fiber height, and<br> Misure of measure of angle of cleaving of bare fibers with great accuracy
- Measurement Report and History Report in HTML format
- Directly export measurement data into any Database
- Low cost!
- Autofocus option

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**Parameter**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Repeatability* / Reproducibility**</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radius (mm)</td>
<td>±0.05% / ±0.05%</td>
<td>3 to flat</td>
</tr>
<tr>
<td>Apex Offset (µm)</td>
<td>±0.5 / ±1</td>
<td>0 to 500</td>
</tr>
<tr>
<td>Fiber Height (mm)</td>
<td>±1 / ±1.5</td>
<td>±160</td>
</tr>
<tr>
<td>Fiber Cleave Angle (°)</td>
<td>± 0.01° / ±0.015°</td>
<td>0 to 12°</td>
</tr>
<tr>
<td>Measurement Speed (sec)</td>
<td>1 sec</td>
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</tr>
<tr>
<td>Magnification</td>
<td>x300</td>
<td></td>
</tr>
<tr>
<td>Wavelength (nm)</td>
<td>633 nm (White-Light optional)</td>
<td></td>
</tr>
<tr>
<td>Power requirements</td>
<td>12V-25VA</td>
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</tr>
</tbody>
</table>

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**All Data-Pixel interferometers offer the following key features:**

- * Non-contact measurement
- * True phase-shifting interferometer
- * Compliance with Industry Standards for Interferometer Measurements
- * High resolution 2D & 3D surface profiles
- * PDF, CSV and HTML formats reporting
- * Data-base connectivity
**DScope**

High quality digital benchtop microscope

This unique microscope combines high quality optics with a modern and ergonomic design ideally suited to fiber optic inspection applications. Until the D-Scope, most microscopes were suffering from poor illumination quality yielding variable and non-reproducible image quality even amongst scopes of the same kind.

**Key features**

- True Koehler optical design for perfectly homogeneous lighting
- BLINK-Automated Visual Inspection software detects in real-time the fiber location and analyses surface defects
- Unique ability to define independent gain and contrast levels for the fiber and ferrule regions for optimized simultaneous viewing of both areas
- Adaptors for all PC & APC, SF & MF connectors
- High-speed USB 2.0 for live digital image
- Field-stop and Aperture-stop diaphragms
- Deep-blue long-life LED light source
- Second oblique light source for surface cleanliness inspection
- Ergonomic fine focus control
- Focus quality indicator in D-Scope software
- Software and Hardware automation capabilities
- Also available as analog output for use with a CRT screen only

**PM ALIGNER & DScope-PM**

A complete solution to align Polarisation Maintaining fiber in a connector

PM ALIGNER and DScope-PM are two products which will enable you to accurately mechanically align the stress elements of a PANDA Polarisation-Maintaining fibre with the key of a connector. PM ALIGNER features an exceptional long working distance of 65mm giving the operator a spacious workspace between the optical measuring head and the connector endface.

DScope-PM combines the high quality inspection image of the DScope microscopes with its low cost advantage.

The BLINK-PM software module will measure in real-time the angular alignment of the stress elements and let the operator rapidly position them to the required angular position.

**Visual Inspection**

<table>
<thead>
<tr>
<th>DScope-x1</th>
<th>DScope-x2</th>
<th>DScope-x4</th>
<th>DScope-x10</th>
<th>DScope-x20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnification</td>
<td>50*</td>
<td>100*</td>
<td>200*</td>
<td>400*</td>
</tr>
<tr>
<td>Field-of-View (mm²)</td>
<td>6.7 x 5.3</td>
<td>3.3 x 2.7</td>
<td>1.7 x 1.3</td>
<td>0.7 x 0.5</td>
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<tr>
<td>Light source</td>
<td>oblique</td>
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<td>coaxial/oblique</td>
<td>coaxial/oblique</td>
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<tr>
<td>Connector types</td>
<td>PC/APC single fiber + Multi-Fiber*</td>
<td>PC/APC single fiber + Multi-Fiber</td>
<td>PC/APC single fiber + Multi-Fiber</td>
<td>PC/APC single fiber + Multi-Fiber</td>
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<tr>
<td>Focus</td>
<td>manual</td>
<td>manual</td>
<td>manual (optional auto)</td>
<td>manual (optional auto)</td>
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<tr>
<td>Aperture/Field stops</td>
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<td>no</td>
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<tr>
<td>Supported BLINK software plug-in</td>
<td>BLINK-Light (Imager viewer)</td>
<td>BLINK-Light (Imager viewer)</td>
<td>BLINK-Light (Imager viewer)</td>
<td>BLINK-Automated Visual Inspection</td>
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<tr>
<td>Power supply</td>
<td>via USB link</td>
<td>via USB link</td>
<td>via USB link</td>
<td>via USB link</td>
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<tr>
<td>Weight (kg)</td>
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<tr>
<td>Dimensions (WxHxD) mm</td>
<td>140x78x250</td>
<td>140x78x250</td>
<td>140x78x250</td>
<td>140x78x250</td>
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</tbody>
</table>
| * comments | Equivalent magnification for a display video screen of 43cm diagonal

Key features

- Measure PANDA style fibers
- Exceptional long working distance of 65mm (PM ALIGNER)
- Automatic and real-time measurement
- Easy calibration BLINK Software
- Measurement data exported in standard CSV format
- Data-base connectivity
- Statistics on measurements available
The new KONCENTRIK-V2 is a modular measurement system. Several mechanical modules adapt on it so that either fiber or ferrule eccentricity measurements can be performed.

**Key Features**
- Measure Ø2.5mm and 1.25mm PC-type connectors, other diameters available
- Ferrule end-face visual inspection at x400 magnification
- Accurate and repeatable measurements
- User adjustable quality level for high-speed measurements
- Easy calibration KONCENTRIK Software
- Measurement data exported in standard CSV format
- Statistics on measurements available

**Measured parameter (unit)  Range  Reproducibility**
- Eccentricity measurement (µm)  0 to 100 µm  +/- 0.05 µm
- Indexing measurement (degrees)  0 to 360°  ±5° if eccentricity > 0.2µm
- Measurement speed (seconds)  10 + (user variable)
- Magnification  x 400
- Wavelength (nm)  450 nm
- Power requirements  12V external supply
- Link to PC  USB 2.0, no card required

Koncentrik-V2/Ferrule
High precision ferrule-bore to ferrule-envelope concentricity and indexing measurements

**Key Features**
- Measure ceramic and metal PC-type ferrules
- Ferrule end-face visual inspection at x400 magnification
- Automatic measurement + re-positioning of ferrule at tuned position.
- Ferrule envelope & bore shape-error measurement
- Accurate and repeatable measurements
- User adjustable quality level for high-speed measurements
- Easy calibration KONCENTRIK Software
- Measurement data exported in standard CSV format
- Statistics on measurements available

**Measured parameter (unit)  Range  Reproducibility**
- Eccentricity (µm)  0 to 100 µm  +/- 0.05 µm
- Indexing (degrees)  0 to 360°  ±5° if eccentricity > 0.2µm
- Measurement speed (seconds)  3 sec + (user variable)
- Magnification  x 400
- Ferrule outside Ø (mm)  1 to 3.17
- Ferrule bore Ø (µm)  5 to 500
- Power requirements  12V external supply
- Link to PC  USB 2.0, no card required

Koncentrik-Far-Field
High precision fiber to ferrule angular misalignment measurements

The Koncentrik-Far-Field will enable you to measure the angular misalignment between the fiber and the ferrule axes in an optical connector as per the IEC 61300-3-26 standard.

The optical performance (Insertion loss) of a connector is mainly influenced by the fiber eccentricity (measured with Data-Pixel’s Koncentrik-V2) and fiber misalignment (also known as “fiber angle” and now measurable with Data-Pixel’s Koncentrik-Far-Field).

You can now fully evaluate and manage the optical performance of your connections with Data-Pixel products. Applications range from quality assurance and supplier-verification to ultra-low insertion loss connections.
Blink

A common software platform for all Data-Pixel products

BLINK is a modern software with a plugin architecture. It supports all Data-Pixel products, each product having a dedicated plugin (Visual Inspection, Interferometry, Concentricity, etc.)

This unique approach has numerous advantages, including:

- A common platform for all our products (DAISI, DAISI-MT, DScope, Koncentrik-V2 and some customized products).
- Operators only need to get familiar with one software to handle all Data-Pixel products.
- PDF, HTML and CSV reporting capability, extensive database support (SQL, MySQL, ODBC, ORACLE...).
- Multi-language support. A translation pack is also available to distributors and customers.
- All hardware setup, parametrisation and reporting are common to all products in this new single platform.
- Support for OptoTest IL/RL popular testers.
- Customisable with multiple administrator and end user levels.
- GUI is dynamic and configurable per customer/operator, dockable toolbars, etc.
- OLE AUTOMATION support.
- A JAVA SCRIPTING plugin is available for advanced users to allow customization of the application functionalities beyond the GUI (e.g., a customized measurement sequence to match your requirements).
- New SUPERVISOR plugin for the management and tracability of workflow, hardware and data in production lines.
- Supports Windows XP, 7 and 8.

BLINK software plugins vs products correspondence table

<table>
<thead>
<tr>
<th>BLINK Plugins</th>
<th>BLINK-Light</th>
<th>BLINK-Interferometry</th>
<th>BLINK-Automated Visual Inspection</th>
<th>BLINK-PM Aligner</th>
<th>BLINK-Concentricity</th>
<th>BLINK-Far-Field</th>
<th>BLINK-External Light Source</th>
<th>BLINK-Script</th>
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<tbody>
<tr>
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</table>

27, Rue Saturne • ZAC Altaïs • 74650 Chavanod • France
Tél. +33 (0)4 50 67 39 80 • Fax +33 (0)4 50 67 39 53
info@data-pixel.com • www.data-pixel.com