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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

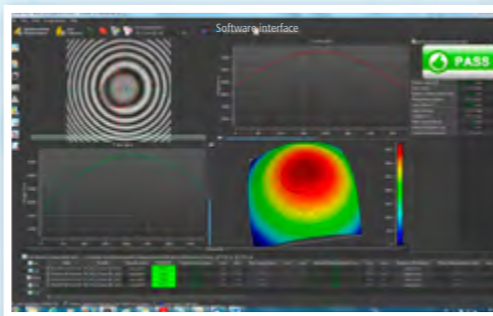
- ★ Single unit for measurement of single-fiber, PC and APC ferrules, connectors and bare fibers
- ★ Lightning speed measurement cycle (0.5secs for SF connectors)
- ★ PASS/FAIL result visual feedback via front panel start-button LED color
- ★ Integrated PC/APC tilt stage, no apex re-calibration required
- ★ True phase-shifting interferometer
- ★ Completely vibration insensitive. Measure while holding system in hand
- ★ Interfaceable to laptop computers via USB2.0
- ★ 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

Parameter	Repeatability* / Reproducibility**	Range
Radius (mm)	±0.05% / ±0.05%	3 to flat
Apex Offset (µm)	±0.5 / ±1	0 to 500
Fiber Height (nm)	±1 / ±1.5	±160
Fiber Cleave Angle (°)	± 0.01° / ± 0.01.5°	0 to 12°
Measurement Speed (sec.)		0.5 sec
Magnification		x400
Wavelength (nm)		633nm
Power requirements		12V external - 12VA
Dimensions (mm³)		140x78x250
Weight (Kg)		1.9



Software BLINK-Interferometry

3DScope-V2 supports the powerful BLINK software platform. Non-compressed, real time and high quality images are transferred from the hardware to the software via a USB 2.0 high speed link in addition to the automation and control commands. 3DScope-V2 is portable and can be interfaced to laptop or desktop computers through one single USB link only (including power). All calibration steps are automated and embedded into a user-friendly software interface in order to yield error-free and reliable measurements.



DAISI-V3

Digital Automated Interferometer for Surface Inspection

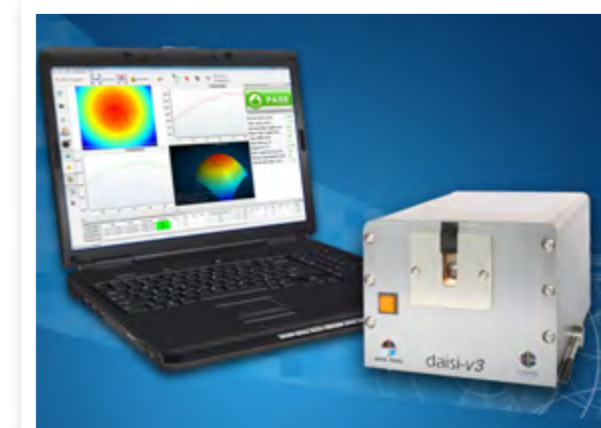
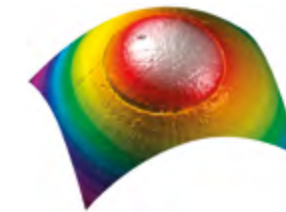
The ultimate production interferometer for measuring end-face geometry on single fiber connectors, equipped with a revolutionary "no-exterior-moving-parts" mechanical design.

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
- ★ Robust Motor driven automated Flange locking Mechanism
- ★ No exterior moving parts or adjustment screws -> No apex decalibration
- ★ Vibration insensitive. Measurements can be made when holding the system by hand
- ★ Easy and fast switching from PC to APC, no change of ferrule holder required
- ★ Connector key adaptors for most connector types. Special design provides easy loading feature
- ★ Connection to laptop computer via High Speed USB3.0 link
- ★ Fast and automated measurement of radius, apex offset, fiber height + more
- ★ Measure fiber and ferrule roughness (Sq parameter)
- ★ Measure angle of cleaving of bare fibers with great precision
- ★ Accurate and repeatable measurements
- ★ BLINK-Automated Visual Inspection software detects in real-time the fiber location and analyses surface defect

Parameter	Repeatability* / Reproducibility**	Range
Radius (mm)	±0.05% / ±0.05%	3 to flat
Apex Offset (µm)	±0.5 / ±1	0 to 500
Fiber Height (nm)	±1 / ±1.5	±160
Fiber Cleave Angle (°)	± 0.01° / ± 0.015°	0 to 12°
Measurement Speed (sec.)		1 sec for interferometry 1 sec for inspection
Magnification		x400
Wavelength (nm)		633nm
Power requirements		12V-25VA

*/** 1 Sigma values.
Repeatability values calculated from 50 consecutive measurements without interaction on connector between measurements.
Reproducibility values calculated from 50 consecutive measurements on a PC-polish connector while rotating connector in ferrule holder between measurements.



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

DAISI-MT-V3

Digital Automated Interferometer for Surface Inspection of Multi-Fiber connectors

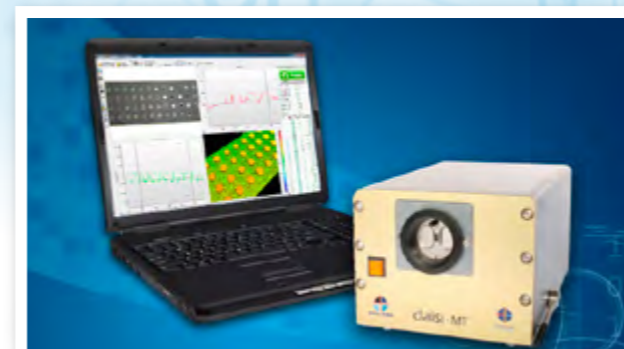
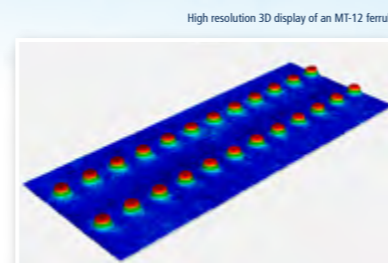
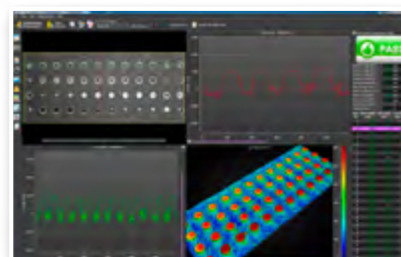
The DAISI-MT interferometer is the industry reference for MT product measurements, based on the same design philosophy that made the DAISI a success. Capable of measuring both single fiber and multi-fiber ferrules. Designed for use in production and field applications.

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, long-life 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
- ★ High speed USB 3.0 connection



Parameter	Repeatability* / Reproducibility**	Range
X & Y angles (°)	0.002 / 0.02	±1° deviation from 0° (PC) or 8° (APC)
Fiber Height (µm)	0.003 / 0.01	up to 20
Measurement Speed		6 sec. scan + 3 sec. reconstruction for a 12 fibers ferrule
AutoFocus speed		10sec.
Field of View		configurable 5.6 x 3.0mm max. Support 16 fibers/row
Lateral Resolution		configurable 2.5µm max.
Wavelength		white & red (632nm) LED
Power requirements		12V - 25VA

* 1 Sigma values based on the measurement of an MT-RJ connector with 2.5µm high fibers and 95% valid pixels.
Repeatability values calculated from 50 consecutive measurements without interaction on connector between measurements.
Reproducibility values calculated from 50 consecutive measurements while removing and inserting connector in ferrule holder between measurements.

Interferometry	3DScope-V2	DAISI-V3	DAISI-MT V3
Field-of-View (mm²)	0.67 x 0.53	0.7 x 0.5	3.3 x 2.7
Scan mode	red (optional white) light	red (optional white) light	red/white light
Connector types	PC/APC single fibre	PC/APC single fibre + MT-RJ	PC/APC single fibre + Multi-Fibre
Focus	manual (optional auto)	auto	auto
Supported BLINK software plugin	BLINK-Interferometry	BLINK-Interferometry inspection	BLINK-Interferometry
Power supply	external 12V	external 12V	external 12V
Net weight (kg)	2	6	6
Dimensions (WxHxD) mm	140x78x250	171x133x244	171x133x244

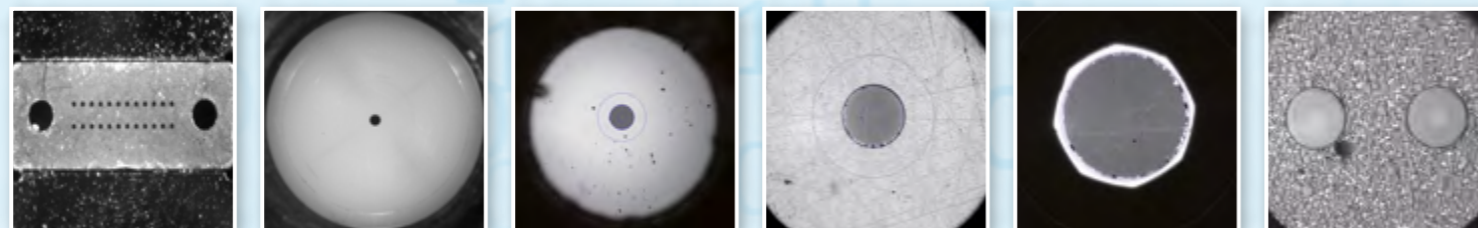
DScope

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 stray-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



Dscope x1 : 6.7mm max. field of view Dscope x2 : 3.3mm max. field of view Dscope x4 : 1.7mm max. field of view Dscope x10 : 0.7mm max. field of view Dscope x20 : 0.3mm max. field of view Multi-Fiber adaptors available

Visual Inspection	Dscope-x1	Dscope-x2	Dscope-x4	Dscope-x10	Dscope-x20
Magnification	50*	100*	200*	400*	800*
Field-of-View (mm ²)	6.7 x 5.3	3.3 x 2.7	1.7 x 1.3	0.7 x 0.5	0.3 x 0.3
Light source	stray-light	stray-light		coaxial/stray-light	stray-light
Connector types	PC/APC single fiber + Multi-Fiber"	PC/APC single fiber + Multi-Fiber	PC/APC single fiber + Multi-Fiber	PC/APC single fiber + Multi-Fiber	PC/APC single fiber + Multi-Fiber
Focus	manual	manual	manual	manual (optional auto)	manual (optional auto)
Aperture/Field stops	no	no	yes	yes	yes
Supported BLINK software plugin				BLINK-Automated Visual Inspection (Autofocus required) BLINK-PM ALIGNER	BLINK-Automated Visual Inspection BLINK-PM ALIGNER
BLINK - Image viewer	yes	yes	yes	yes	yes
Power supply	via USB link	via USB link	via USB link	via USB link	via USB link
Net weight (kg)	2	2	2	2	2
Dimensions (WxHxD) mm	140x78x250	140x78x250	140x78x250	140x78x250	140x78x250
* comments	Equivalent magnification for a display video screen of 43cm diagonal				

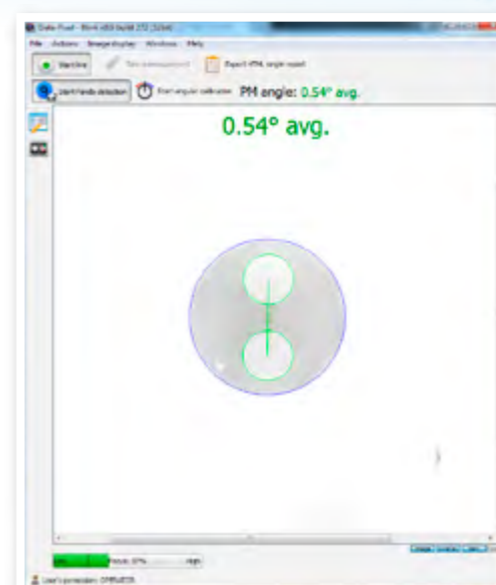
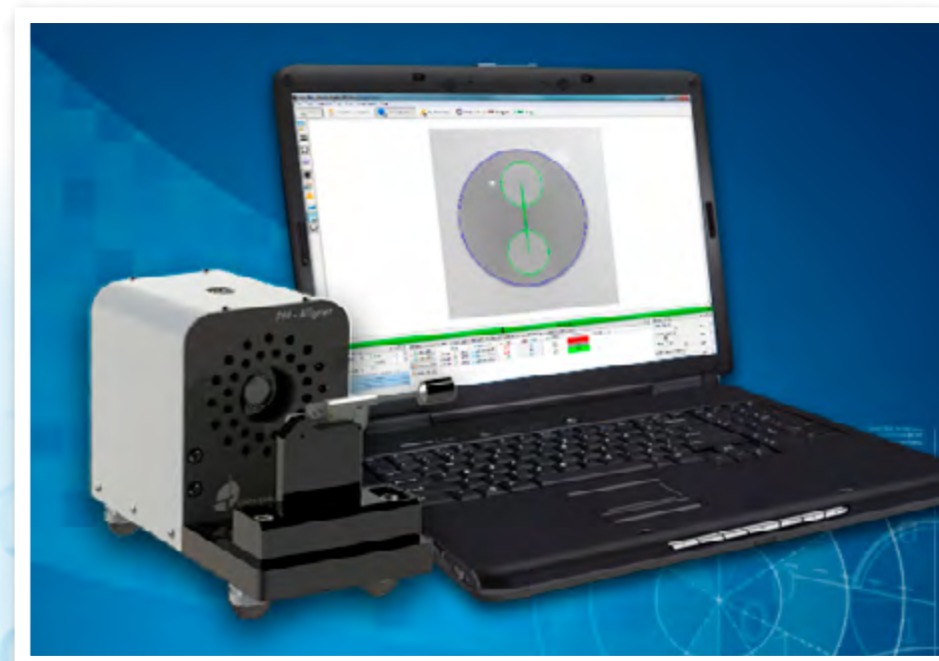
PM ALIGNER & DScope-PM

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.



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

Koncentrik-V2/Connector

High precision fiber-core to ferrule-envelope concentricity and indexing measurements

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



Parameter	Reproducibility	Range
Eccentricity measurement (µm)	+/- 0.05 µm	0 to 100 µm
Indexing measurement (degrees)	±5° if eccentricity > 0.2µm	0 to 360°
Measurement speed (seconds)		10 + (user variable)
Magnification		x 400
Ferrule outside Ø (mm)		1 to 3.17
Fiber core Ø (µm)		5 to 400
Wavelength (nm)		450 nm
Power requirements		12V external supply
Link to PC		USB 2.0, no card required

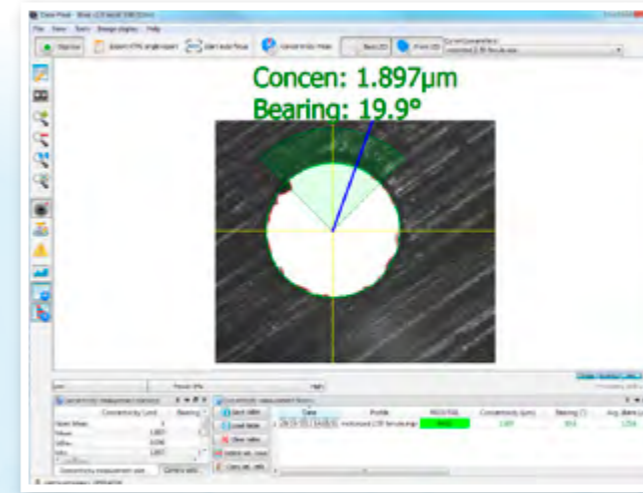
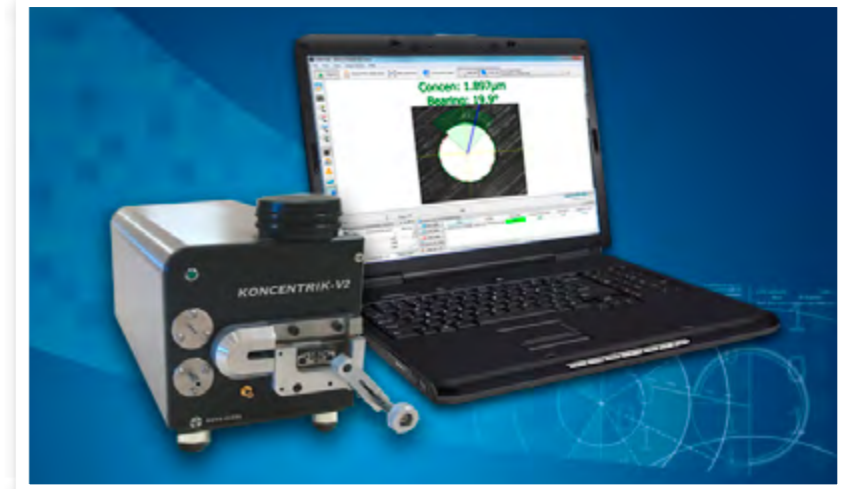


Koncentrik-V2/Ferrule

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



Parameter	Reproducibility	Range
Eccentricity (µm)	+/- 0.05 µm	0 to 100 µm
Indexing (degrees)	±5° if eccentricity > 0.2µm	0 to 360°
Measurement speed (seconds)		3 sec + (user variable)
Magnification		x 400
Ferrule outside Ø (mm)		1 to 3.17
Ferrule bore Ø (µm)		5 to 400
Power requirements		12V external supply
Link to PC		USB2.0, no card required

Koncentrik-Far-Field

High precision fiber to ferrule angular misalignment measurements

The Koncentrik-FarField 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-FarField).

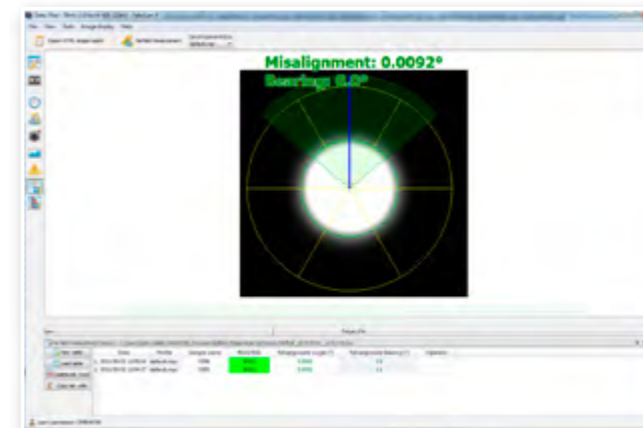
You can now fully evaluate and manage the optical performance of your connections with Data-Pixel products.

Applications range from quality assurance and supplier-verification to ultra-low insertion loss connections



Key Features

- ★ Measure SM and MM fiber types, all PC-polish connector types
- ★ Measurement data exported in standard CSV format
- ★ Data-base connectivity
- ★ Statistics on measurements available



Concentricity/ Fiber angle	Koncentrik- Connector	Koncentrik- Ferrule	Koncentrik- Far-Field
Field-of-View (mm ²)	0.7 x 0.5*	0.7 x 0.5*	6.7 x 5.3
Light source	integrated + optional high power external	integrated + optional high power external	integrated + optional high power external
Connector types	PC single fiber (SM+MM)	PC single fiber (SM+MM)	PC single fiber (SM+MM)
Focus	manual (optional auto)	manual (optional auto)	n/a
Supported BLINK software plugin	BLINK-Concentricity	BLINK-Concentricity	BLINK-Far-Field
Power supply	external 12V	external 12V	via USB link
Net weight (kg)	5	5	3
Dimensions (WxHxD) mm	120x152x265	120x152x315	120x152x265
* comments	larger field-of-views available upon request		

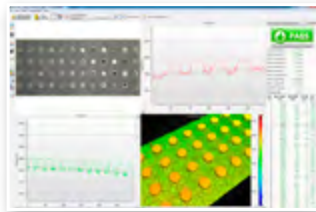
Blink

A software platform common to all Data-Pixel products

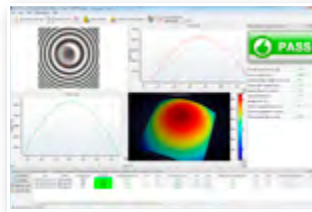
BLINK is a modern software with a plugin architecture. It supports all Data-Pixel products, each product having a dedicated plugin (Visual Inspection, Interferometry, Concentricity, etc.)

This unique approach has numerous advantages, including:

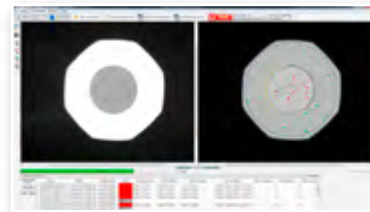
- ★ A common platform for all our products (DAISI, DAISI-MT, DScope, Koncentrik-V2 and some customized products).
- ★ Operators only need to get familiar with one software to handle all Data-Pixel products
- ★ PDF, HTML and CSV reporting capability, extensive database support (SQL, MySQL, ODBC, ORACLE...)
- ★ 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 (eg. 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, 8 and 10



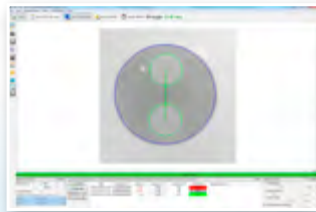
Interferometry-MT plugin



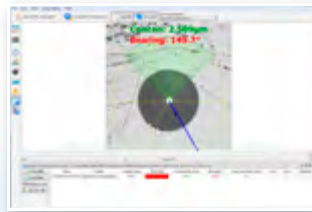
Interferometry plugin



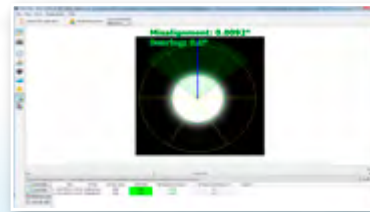
Automated Visual Inspection plugin



PM Aligner plugin



Concentricity plugin



Far-Field plugin

BLINK software plugins vs products correspondance table			BLINK PLUGINS							BLINK-Script	
			BLINK	BLINK Image viewer	BLINK-Interferometry	BLINK-Automated Visual Inspection	BLINK-PM Aligner	BLINK-Concentricity	BLINK-Far-Field		BLINK-External Light Source
Product	Interferometry	3DScope-V2	•		•					•	•
		DAISI-V3	•		•	•				•	•
		3DScope-MT	•		•					•	•
		DAISI-MT-V3	•		•					•	•
	Visual Inspection	Dscope-x1	•	•						•	•
		Dscope-x2	•	•						•	•
		Dscope-x4	•	•						•	•
		Dscope-x10	•	•		•	•			•	•
		Dscope-x20	•	•		•				•	•
	Concentricity Fiber angle	Koncentrik-Connector	•			•	•	•		•	•
		Koncentrik-Ferrule	•			•	•	•		•	•
		Koncentrik-Far-Field	•						•	•	•