metrios
by VICIVISION

OPTICAL MEASURING SYSTEMS

for shop floor quality control



FROM MICROPARTS TO LARGE, COMPLEX COMPONENTS

Less setup.
Faster dimensional decisions.

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LESS SETUP FASTER MEASUREMENTS

Turn dimensional inspection into a simpler, repeatable process that production operators can use every day.

METRIOS simplifies dimensional inspection by automating part recognition and measurement. Components can be placed freely on the stage, with no dedicated fixturing for standard flat parts. Multiple parts can be checked in one cycle, while the touchscreen provides immediate OK / NOT OK results and stores data for reporting and process analysis.

Place	Measure	Decide	Use the data
Position parts freely on the stage.	Inspect one or multiple parts automatically.	See clear dimensional conformity immediately.	Export results for reports, SPC and quality systems.

From part recognition to dimensional result, with fewer manual steps.

SEE WHAT YOU MEASURE, MEASURE WHAT YOU SEE

METRIOS software is built around the real image of the component. Operators can zoom, select profiles and define measurements directly on the touchscreen, making dimensional inspection immediate and intuitive even for users who are not metrology specialists.

Touchscreen control

Interact directly with the real image of the part. Select, zoom and measure with intuitive touch commands.

Automatic part recognition

METRIOS can identify the component and recall the correct measuring program automatically.

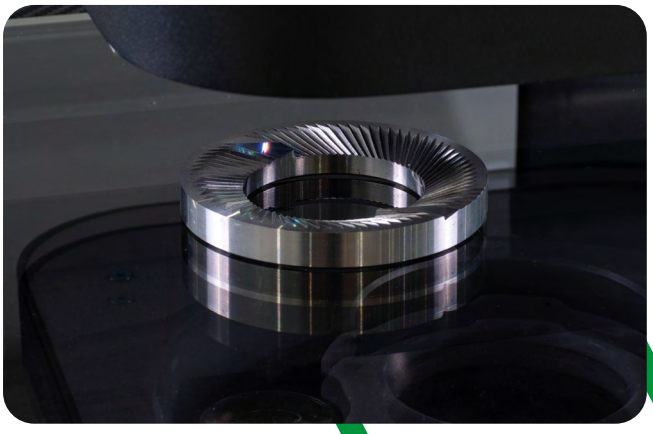
From measurement to data

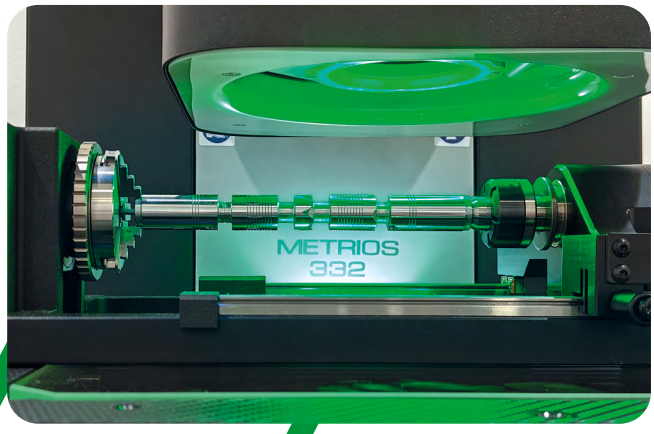
Generate reports, trends and process data automatically, turning inspection results into information that can be used by quality and production teams.

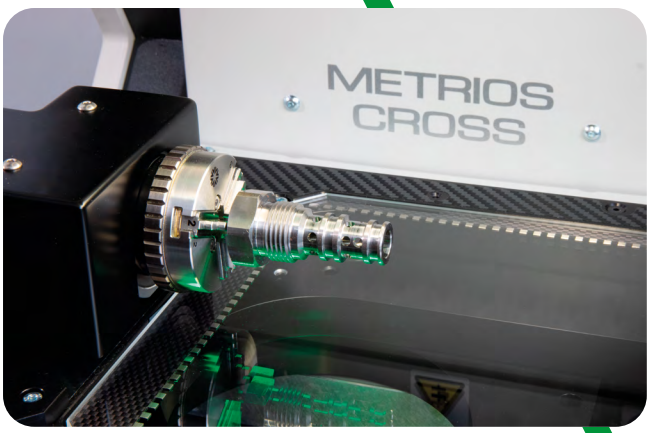
EXTEND WHAT ONE INSPECTION CAN SEE

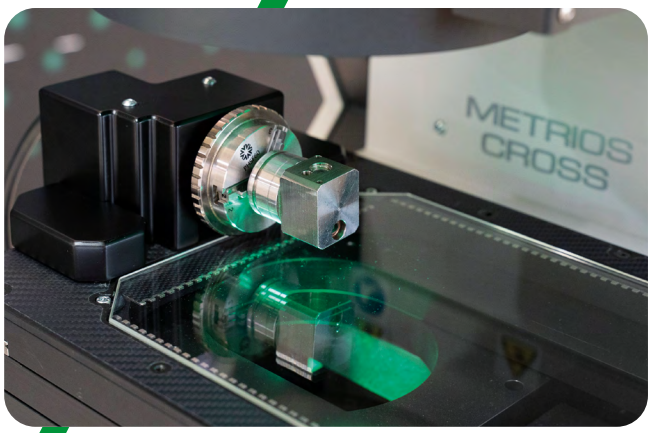
Add the capability the application needs: height information, controlled orientation or stable support for long components.

Technology	What it adds	Customer benefit
CONFOCAL SENSOR *Available on:* **Metrios 332 + Metrios 532**	Micrometric height, steps, depths, planes and complex profiles; works on reflective, transparent or challenging surfaces	Combines 2D optical inspection and precise height data without repositioning the part
RE-LIGHT ROTARY AXIS *Available on:* **Metrios CROSS + Metrios HD CROSS + Metrios 332 + Metrios 532**	Controls part orientation automatically when components cannot be positioned perfectly flat	Reduces setup variability and manual positioning; improves repeatability on turned, milled and complex parts
TAILSTOCK *Available on:* **Metrios 332 + Metrios 532**	Metrios 332 up to 300 mm long Metrios 532 up to 500 mm long	Keeps the component aligned through the cycle without complex dedicated fixturing









THE RIGHT METRIOS
FOR YOUR APPLICATION

One measurement philosophy.
Six systems for different part sizes, detail levels and inspection needs.

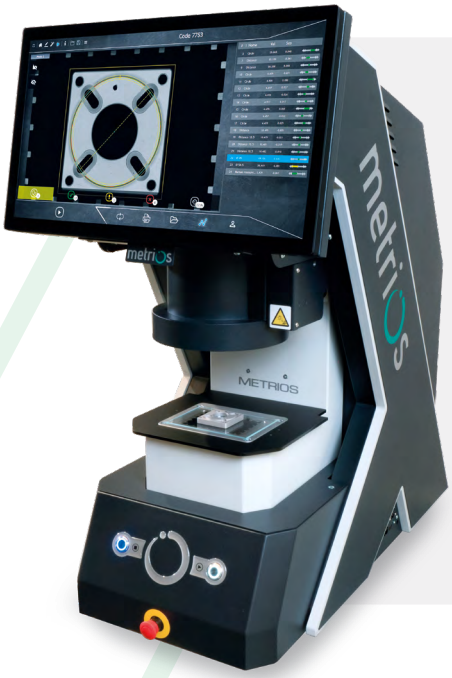
Start with the component. Choose the measuring area or volume, the level of detail and the additional capabilities your application requires. Every METRIOS system follows the same intuitive workflow, from part placement to dimensional results and data management.

System	Measuring area / volume	Best for	Z	Optional capabilities
 **METRIOS**	*95×65 mm*	General 2D inspection	-	-
 **METRIOS *HD***	*25×25 mm*	Microfeatures / fine detail	-	-
 **METRIOS *CROSS***	*265×200 mm*	Larger area / more parts	-	· Re-Light
 **METRIOS *HD CROSS***	*200×100×80 mm*	Fine detail + extended volume	80 mm	· Re-Light
 **METRIOS *332***	*300×300×200 mm*	Large / complex parts and extreme detail (UHD camera)	200 mm	· Confocal · Re-Light · Tailstock
 **METRIOS *532***	*500×300×200 mm*	Largest field / complex parts and extreme detail (UHD camera)	200 mm	· Confocal · Re-Light · Tailstock

START WITH THE PART, CHOOSE THE DETAIL LEVEL

Two compact systems for fast optical inspection: one for everyday dimensional control, one for fine-detail inspection.

METRIOS and METRIOS HD digitise the familiar logic of the profile projector: place the component on the stage, inspect it optically and read the result directly on the touchscreen. Both support automatic, repeatable inspection without dedicated fixturing for standard flat-part applications and can measure multiple parts in the same cycle.



METRIOS

95×65 mm

A versatile entry point for fast 2D dimensional inspection of flat and prismatic precision parts. Its larger single-shot field makes it well suited to general mechanical components, stamped parts, connectors, gaskets and mixed inspection tasks.

- **BENEFITS:** faster setup; intuitive touch measurement; multiple-part inspection; direct shop-floor use.
- **CHOOSE WHEN:** you need a broad, simple 2D inspection tool for everyday parts and mixed production.

METRIOS HD

25×25 mm

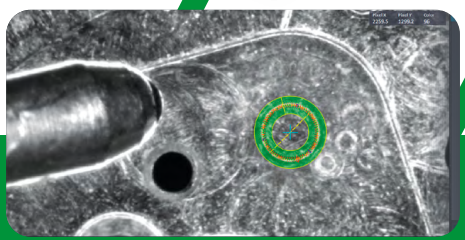
Designed for applications where the component is small and fine details drive the inspection. High-resolution imaging increases visibility of microprofiles and minute geometries, making HD the natural choice for microconnectors, watch components, small medical parts and precision micromechanics.

- **BENEFITS:** more detail on small parts; non-contact inspection; repeatable inspection of microfeatures.
- **CHOOSE WHEN:** the inspection is driven by miniature geometry, small profiles or very fine dimensional detail.









MORE AREA, MORE PARTS, MORE FLEXIBILITY

Extend the METRIOS workflow when the component – or the batch on the stage – no longer fits inside a compact field of view.

The CROSS models are designed for inspections that need more working area than the compact METRIOS systems. That extra capacity can be used in two ways: to inspect larger components or to place more parts on the stage and measure them in the same cycle. Re-Light can also be added when the part cannot be positioned perfectly and its orientation must be controlled during measurement.

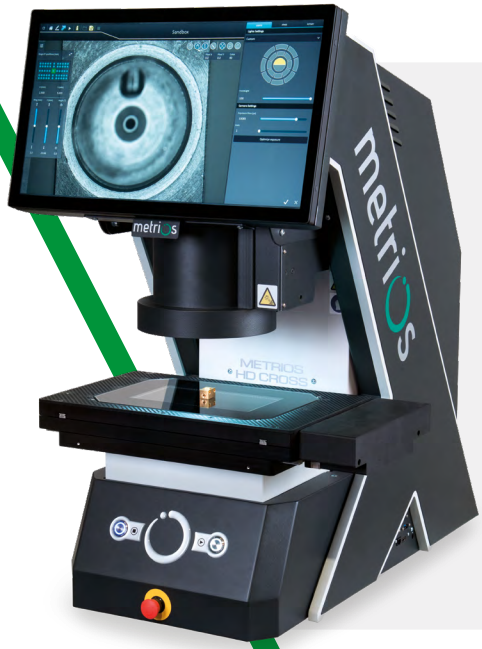
METRIOS CROSS

265×200 mm

Choose CROSS when inspection productivity depends on covering a larger area: larger flat/prismatic components, trays of repeated parts or mixed batches. The extended area makes multiple-part inspection more productive without changing the simple METRIOS operating logic.

- **IDEAL EXAMPLES:** stamped parts, connectors, gaskets, plastic components, mechanical plates.
- **CHOOSE WHEN:** you need a larger measuring area or want to inspect more parts in each cycle.



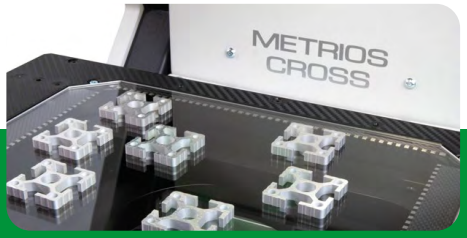


METRIOS HD CROSS

200×100×80 mm

Choose HD CROSS when small details still matter, but the application also requires more travel/working volume than METRIOS HD. It combines high-resolution imaging with extended measurement capacity for microfeatures distributed over larger components or across multiple pieces.

- **IDEAL EXAMPLES:** precision electronics, micromechanics, small medical parts, fine-profile components.
- **CHOOSE WHEN:** you need fine detail together with extended measuring travel and support for different part heights.

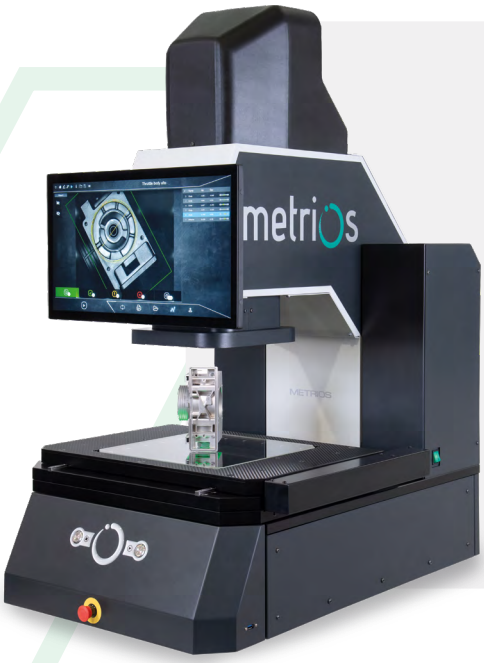




LARGER PARTS, MULTISENSOR INSPECTION

Multisensor optical measurement for applications that need more space, more dimensional information or more parts in one cycle.

METRIOS 332 and 532 are designed for larger, heavier and more complex inspection tasks. Their Ultra HD camera delivers high-resolution imaging across a large working volume, supporting detailed optical inspection even on complex components. Both systems provide X-Y-Z measuring capacity, support loads up to 20 kg and combine advanced optical performance with multisensor capability. Optional confocal sensing increases the accuracy and reliability of Z measurements, providing high-precision non-contact height data for demanding features and surfaces.



METRIOS 332

300×300×200 mm

A complete multisensor platform when the application needs substantial measuring volume without moving to the widest machine. It is particularly flexible when the part is geometrically complex or when the inspection may need optional confocal height measurement, Re-Light orientation or support for longitudinal components.

- **BEST FOR:** large and complex parts, mixed inspection, 3-axis measurements, configurable applications and very fine detail inspection thanks to the Ultra HD camera.
- **CHOOSE WHEN:** you need multisensor capability plus a highly configurable 300×300×200 mm volume.

METRIOS 532

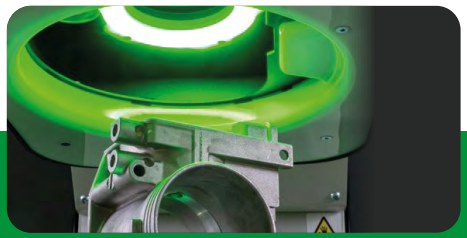
500×300×200 mm

Uses the same advanced multisensor concept with a wider X measuring range. Choose 532 when the limiting factor is component width or when a larger stage allows more parts to be inspected in one cycle.

- **BEST FOR:** wider components, larger layouts, high-volume multiple-part inspection and applications that benefit from the same 200 mm Z capacity over a broader field.
- **CHOOSE WHEN:** you need multisensor capability with a wider 500 mm X range or more usable area for multiple-part inspection.







Start with your part.

Talk to our specialists to identify the right Metrios model, sensor package and inspection workflow for your application.

Contact us

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