



METROLOGY LAB PRECISION ON THE PRODUCTION LINE

ISO 17025 accredited



30+ YEARS OF METROLOGY EXPERIENCE

THIRD DIMENSION
ADVANCING MANUFACTURING



THE GAPGUN®

The smart handheld solution for precision feature measurement.

The GapGun® is a state-of-the-art laser measurement device designed to provide fast, accurate, and repeatable dimensional measurements, including gap, flushness, radii, angle and more.

It has been designed to work on a wide range of challenging geometries and surface finishes, making the GapGun® a highly versatile tool that can be used across various industries.



“GapGun is the ideal tool for quickly and accurately measuring small gaps and profiles throughout the plane panels... it has saved time and money throughout the production process.”

WHY CHOOSE GAPGUN® ?



One device, multiple applications

The GapGun® can characterise all manner of dimensional properties of a feature, such as gap width, flushness, depth, diameter, angle, and more. This means one device can be used for multiple applications, which eliminates the hassle (and cost) of multiple different measurement devices.



Eliminate subjectivity in your measurements

Traditional measurement tools often suffer from inaccuracies caused by human-related errors. With the GapGun®, measurements are derived from an exact two-dimensional profile of the feature. This ensures accurate measurements without requiring subjective interpretation.



Instant feedback, actionable decisions

The GapGun® goes beyond conventional measurement tools by giving the option to integrate dimensional tolerances into your measurement programs. This feature gives operators real-time feedback on whether a part meets the specified tolerances, allowing them to make prompt decisions regarding rework and adjustments, ultimately leading to process improvements.



Ensure ROI through improved productivity

Speed of measurement, automatic data logging and reporting, seamless data integration, and measurement traceability are just a few reasons why the GapGun® is saving customers time and money. By improving the efficiency of the inspection process, the GapGun® can lead to substantial increases in throughput and overall productivity.



THE GAPGUN COMES EQUIPPED WITH A MARKET LEADING RANGE OF FEATURES



Fast



Accurate



Repeatable



Non-contact



Traceable



CREATE BESPOKE CHECKPLANS

Our software lets you define inspection programs including instruction graphics that user can follow with minimal training.



SHARE MEASUREMENT PLANNING

Manage multiple GapGuns using our software and multiple users collaborate across inspection programs.



TOUCH SCREEN INTERFACE

Navigate through checkplans easily with the GapGun's high resolution capacitive touchscreen.



EXPORT MEASUREMENT RESULTS

Export measurement results to common formats such as CSV, SQL, XML, Excel, and PDF. Interface with leading SPC packages such as FLAGS and QDAS.



ON-SCREEN RESULTS ANALYSIS

View measured profiles on-screen, analyse with clear markup and RAG indicating pass/fail.



MODULAR SENSOR HEADS

Quickly swap between sensor heads using our robust and improved mounting system.



ACCESS HARD-TO-REACH PLACES

Use our extension cable accessory to reach confined and restricted spaces.



FULLY INTEGRATED WI-FI CAPABILITY

Feed measurement back to your production systems in real-time.



UNIFIED DOCKING STATION

Re-charge the GapGun, external batteries, and connect to a wired network simultaneously.



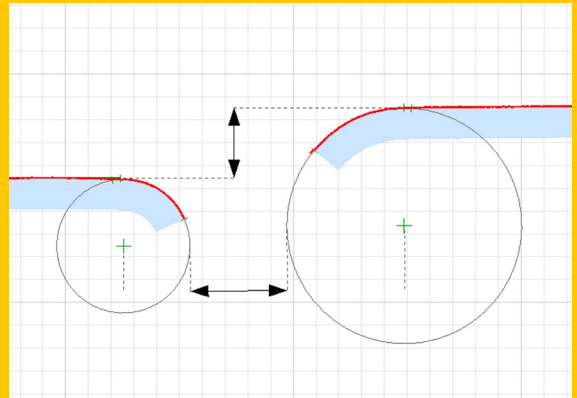
HI-RANGE SENSOR HEAD CAPABILITY

Measure a range of surfaces including head lights, chrome, high gloss black paint and carbon fibre.

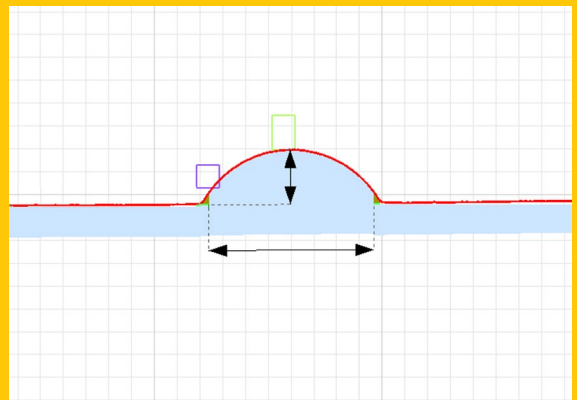
ONE TOOL, INFINITE APPLICATIONS



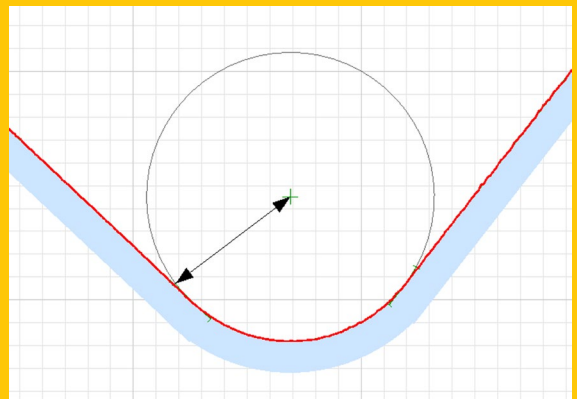
GAP & FLUSH



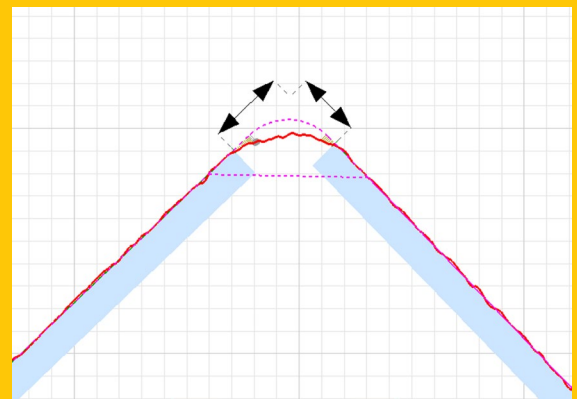
WELD & SEAL



RADIUS

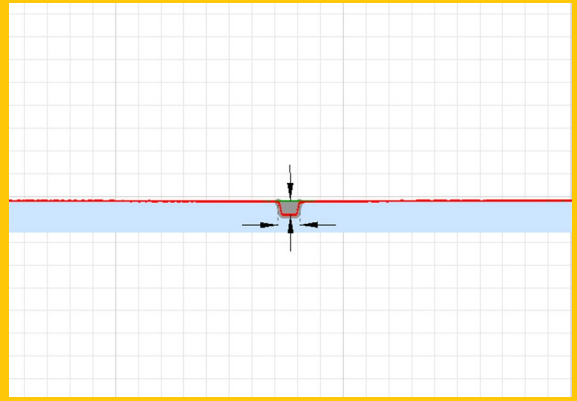


EDGE BREAK

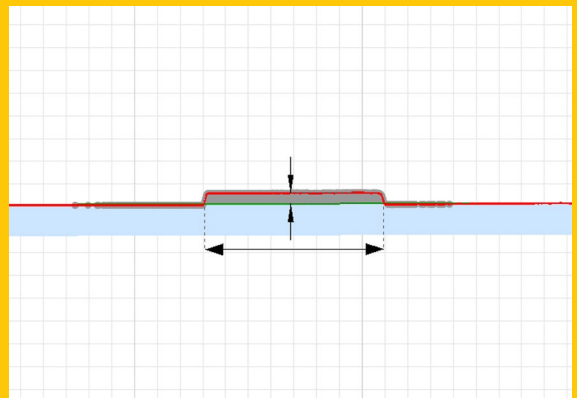




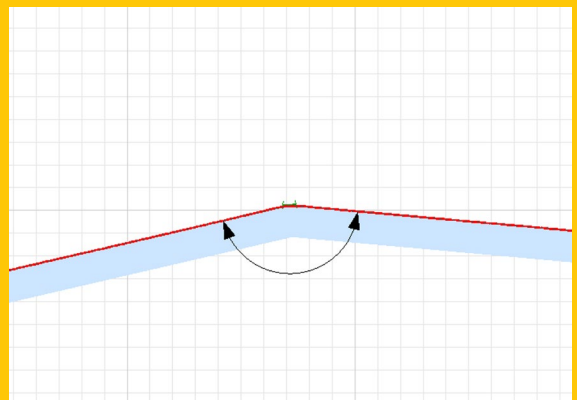
SCRATCH & DEEFECT



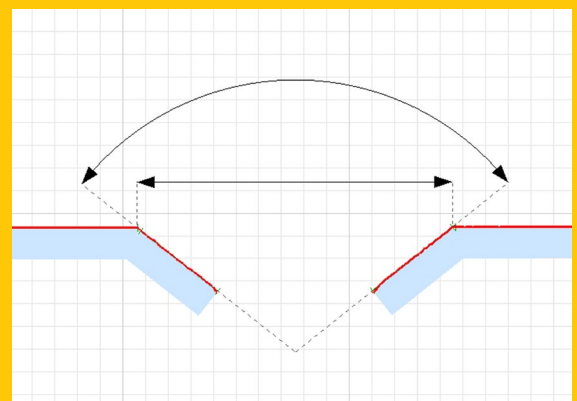
RIVET & FASTENER



ANGLE



COUNTERSINK



T-SERIES SENSOR HEAD SPECIFICATION



Sensor head T60-V



Sensor head T15-M

Laser Classification	Class 2M Laser	
Shock Protection	Integrated Shock Jacket	
Operating Temperature	0°C - 40°C (32°F - 104°F)	
Storage Temperature	-20°C - 60°C (-4°F - 140°F)	
Field of view	60 mm	15 mm
Size	41 mm x 56 mm x 99 mm	36 mm x 60 mm x 83 mm
Weight	170g (5.9 oz)	175g (6.1 oz)
Calibrated Artefacts*	Gap, Flush, Radius	Gap, Flush, Radius, Edge, Chamfer
Calibrated Range Gap*	0.3 mm - 40 mm	0.3 mm - 5 mm
Calibrated Range Radius*	10 mm - 30 mm	1 mm - 5 mm
Accuracy (Gap)*	60 µm	30 µm
Repeatability (Gap)*	25 µm	15 µm
Accreditation*	ISO 17025	

*Indicative only. Refer to document D19-034-8.1 for complete performance specification and accreditation scope.

ACCESSORIES AND OPTIONS

Included

Unified Docking Station	Re-charge the GapGun, external batteries, & connect to a wired network simultaneously.
Protective Case	Watertight, dust proof and crushproof Peli™ 1500 case with custom foam inserts.
Additional Battery	Hot-swappable batteries to allow continuous use.
Calibration Block	Calibrate with ease.
Standard Stand-off Set	Enables fast and reproducible measurements.

Optional

Head Extension Cable	Take measurements in tight and hard to access locations.
Customised Stand-off Set	Custom standoffs available on request.

YOUR LOCAL DISTRIBUTOR WILL BE HAPPY TO HELP ADVISE YOU ON THE BEST SENSOR HEAD AND ACCESSORIES FOR YOUR APPLICATION. TO FIND A DISTRIBUTOR NEAR YOU SIMPLY EMAIL INFO@THIRD.COM

GAPGUN 6 SPECIFICATION



Display	IPS capacitive touchscreen
Size	5"
Resolution	1080 x 1920 pixel
Processor	Quad core ARM Cortex-A53 with Neural Processing Unit
Memory	4GB
Storage	32GB
Ethernet	100Mbps (via docking station)
Wireless	Wi-Fi 5 802.11ac (2.4GHz & 5GHz)
Power rating (battery)	Swappable external smart batteries
Feedback	Audio and haptic
Software	ThirdOS
User Interface	Touchscreen, trigger & power button
Operating Temperature	0 - 40°C (32 - 104°F)
Storage Temperature	-20 - 60°C (-4 - 140°F)
Shock Protection	Shock protection jacket fitted as standard
Size	93 mm x 165 mm x 200 mm
Weight	770g

RECOMMENDED SOFTWARE

INSIGHT

Insight software pack

The latest software product from Third Dimension. Insight is a containerised application that offers a complete and centralised solution for managing GapGun devices, users, inspection programs & results analysis. Enable integrations with third party product through Insight's fully featured API.

COMPATIBLE SOFTWARE



SPC3d software pack

For checkplan configuring virtual measurement tools, data logging and reviewing measurements.



Link software pack

Allows custom .NET programs to be written controlling the GapGun or Vectro devices.



Inspect software pack

For manual and interactive analysis of measurement data.



Inline software pack

Allows a large overhead display of measured results.



ABOUT

UK based company, Third Dimension design and manufacture the non-contact precision measurement systems, GapGun® (hand-held) and Vectro® (robotic). Established in 1995, Third Dimension has a long track record of supplying non-contact optical measurement equipment and services to the largest names in aerospace, automotive and energy sectors worldwide.

Holder of two Queen's Awards for Enterprise, our systems have been fully integrated into quality control processes by leading OEMs, Tier 1s and 2s in the automotive, aerospace and energy sectors globally.

Achieving ISO 17025 accreditation in 2019, Third Dimension continues to lead the way in non-contact precision measurement tooling.



"GapGun has allowed my team to digitise their inspection process, and automate the export of our data. The time saving was critical as we ramped up production at our site."

ARRANGE A DEMONSTRATION TODAY

Contact one of our expert Distributors in your area to arrange a free demonstration in your facility.

Unsure of who your local distributor is?

Simply call +44(0)3333 44 3000 or email info@third.com and we will talk through your requirements and put you in contact with the nearest distributor to you.

GET IN CONTACT

+44(0)3333 443 000

info@third.com

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FOLLOW US

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CUSTOMERS

Third Dimension's distribution network serves customers in 30+ countries worldwide. These include:



GapGun and Vectro systems are designed, developed and manufactured by:

THIRD DIMENSION
ADVANCING MANUFACTURING

Third Dimension, 2 Brabazon Office Park, Golf Course Lane, Filton, Bristol, BS34 7PZ, United Kingdom.

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