VECTRO

PRECISION **AUTOMATED** FEATURE MEASUREMENT

FASTER, EASIER AND MORE COST EFFECTIVE THAN EVER BEFORE

THIRD DIMENSION
ADVANCING MANUFACTURING

VECTRO. DESIGNED FOR AUTOMATION

Vectro automates the advanced non-contact feature measurement capabilities of the GapGun Pro, Third Dimension's bestselling handheld laser measurement system.

It's simpler and faster delivering increased levels of accuracy and excellent returns on investment.

For fast throughput of production quality checks

• Vectro and sensor mounted on a robot arm move to enable measurement of a part.

For high precision break sharp edge applications

• Vectro and sensor mounted on a fixture, measuring a fixed part.

• Vectro and sensor mounted on a fixture, with a robot bringing the part to be measured.

For offline metrology testing for research and development

• Vectro and sensor mounted in any fixtured or robotic configuration.

VERSATILE AND COMPATIBLE

Vectro works either robot mounted or in fixtured applications. The system includes a mounting plate that can be attached to your choice of robot.

REDUCE COSTS, IMPROVE QUALITY AND INCREASE PRODUCTIVITY

Vectro improves productivity by enabling greater throughput, cutting inspection costs and reducing rework. All of this with the added benefit of improved quality.

01

Fast and efficient

Vectro measures quickly and automatically, allowing more to be manufactured every hour, without sacrificing quality.

02

Accurate, repeatable and reliable

Consistent positioning with fixtured or robotically guided measurements eliminates human error and ensures accurate results every time. VChange sensors come with full calibration certificates, traceability and a 3 year warranty.

03

Automatic manufacturing decisions

Vectro automates checking of parts against their dimensional specification with real-time go/no-go decisions, or statistical analysis.

04

Modular and versatile

Vectro is compatible with the full range of VChange sensor heads, allowing the measurement of a diverse range of feature shapes, sizes and surface types. For even greater versatility, Vectro is tool changer compatible to dynamically switch sensor heads.

05

Easy to integrate

Vectro can be built into any application with Third Dimension's easy-to-use Link integration software. Simple commands trigger measurements and retrieve results, leaving more time to focus on the production process.
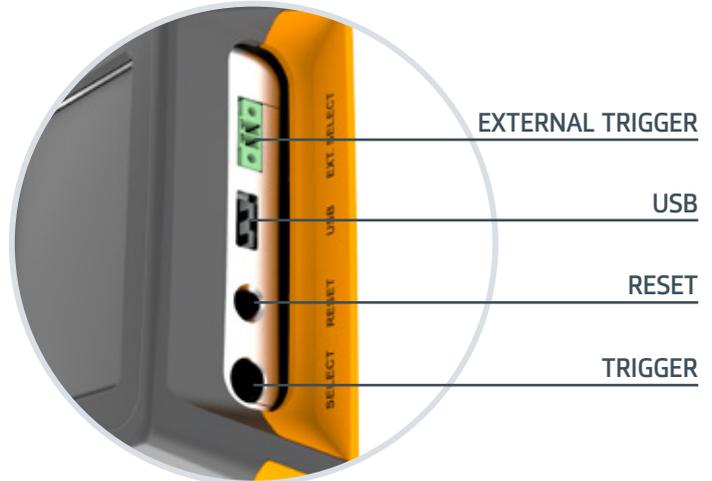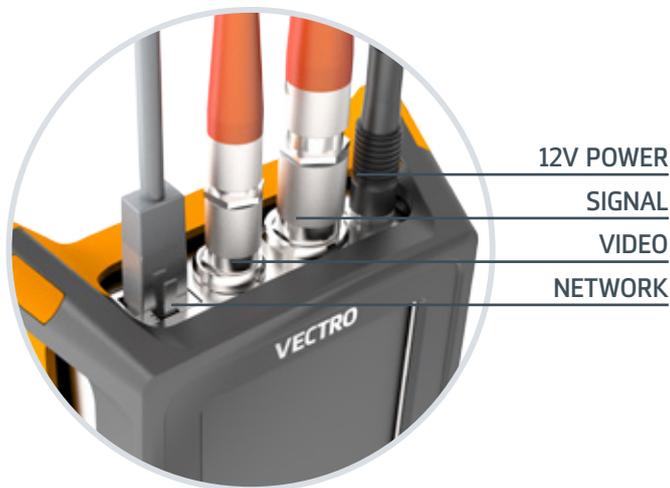
06

Dynamic user interface

The Vectro display presents live profile information and measured values, making it even easier to focus on improving the quality of products.

Automated feature measurement from a fully integrated system.

THE VECTRO BASE SYSTEM INCLUDES:

- Vectro data collector
- Power converter
- Head mount
- GapGun 7.6 or later software to run on Vectro
- VChange sensor head(s) as required
- Controller to head mount cables
- Mains power leads
- Software pack(s) as required

12V POWER
SIGNAL
VIDEO
NETWORK

EXTERNAL TRIGGER
USB
RESET
TRIGGER

SENSOR TYPES

A vast range of measurements can be collected using just one system and Third Dimension's extensive range of interchangeable VChange sensors:

1. SUPER HIGH RESOLUTION: 7mm	2. HIGH RESOLUTION: 15mm	3. STANDARD: 40mm	4. WIDE ANGLE: 80mm
Field of view: 6.5mm (0.26″)	Field of view: 25mm (1.0″)	Field of view: 55mm (2.2″)	Field of view: 90mm (3.5″)
RET resolution: 3μ (0.0001″)	Max gap & flush: 10mm (0.4″)	Max gap & flush: 25mm (1″)	Max gap & flush: 50mm (2″)
	RET resolution: 11μ (0.0004″)	RET resolution: 24μ (0.0010″)	RET resolution: 40μ (0.0016″)

VECTRO TECHNICAL SPECIFICATION

VECTRO CONTROLLER

Product code	GG16-0614
Power rating	6W (12V @ 0.5A)
Screen	97mm (3.8") Daylight readable, full colour, high resolution LCD touchscreen 640 x 480px
User interface	Click and drag touchscreen, trigger and power/reset button
Feedback	Audio output and Haptic feedback
Storage capacity	2GB internal storage
Peripheral devices	USB 2.0 port
IP rating	IP 50
Ethernet	100MBPS Fast Ethernet (100BaseTX)
Operating temperature	0 to 40°C (32 to 104°F)
Storage temperature	-20°C to 60°C (-4 to 140°F)
Size	116 x 134 x 46.5mm (4.5 x 5.3 x 1.8") L x W x D
Weight	460g (16oz)
Software	GapGun 7.6 or later (included)

SENSOR MOUNT

Product code	GG16-1488
Compatibility	Any VChange sensor: FOV7, FOV15, FOV40 or FOV80
IP rating	IP50

CONTROLLER TO SENSOR MOUNT CABLES

Length	3m
Connector type	LEMO locking connectors

COMPATIBLE PC SOFTWARE

GG17-0056	**SPC3d Software Pack:** for configuring Virtual measurement tools, data logging, reviewing measurements	SPC3d
GG17-0067	**Inline Software Pack:** allows a large overhead display of measured results	INLINE
GG17-0078	**Link Software Pack:** allows custom .NET programs to be written controlling the Vectro	LINK
GG17-0089	**Link remote tool Software Pack:** as above, with remote tool capability	LINK
GG17-0090	**Inspect Software Pack:** for manual and interactive analysis of measurement data	INSPECT NEW

POWER SUPPLY

Product code	GG17-0708
Voltage	12V

SYSTEM

Standards	CE declaration of conformity
Measurement capability	Defined by specification D05031. Sensor heads include a calibration and certificate.

WARRANTY AND SERVICE

Maintenance and service	Agreements available from your local distributor.

WANT TO KNOW HOW VECTRO CAN HELP REDUCE COSTS AND IMPROVE QUALITY?

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🐦 @thegapgun
🇫 ThirdDim

Vectro systems are designed,
developed and manufactured by:

THIRD DIMENSION
ADVANCING MANUFACTURING

Authorised dealer