



# 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

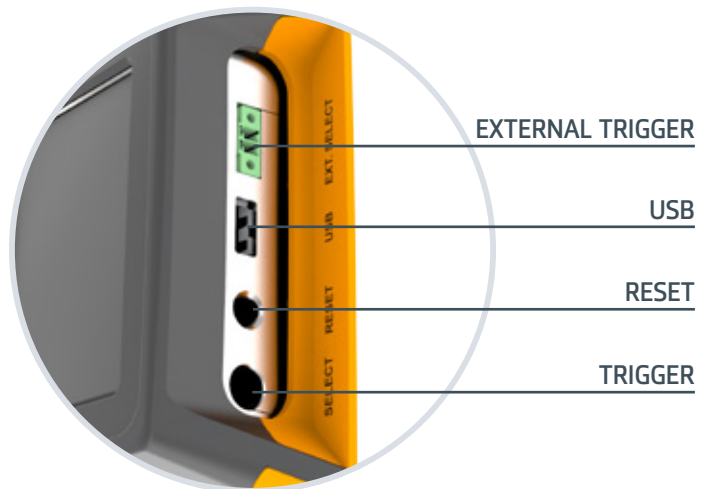
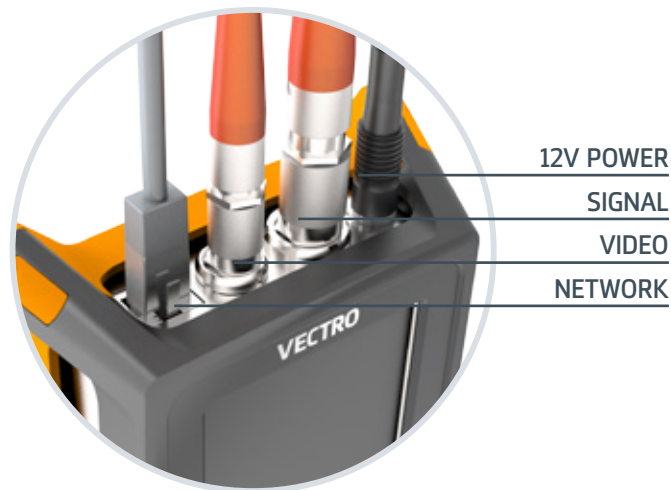
The Vectro display presents live profile information and measured values, making it even easier to focus on improving the quality of products.



# 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



## 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

Field of view: 6.5mm (0.26")  
RET resolution: 3 $\mu$  (0.0001")



### 2. HIGH RESOLUTION: 15mm

Field of view: 25mm (1.0")  
Max gap & flush: 10mm (0.4")  
RET resolution: 11 $\mu$  (0.0004")



### 3. STANDARD: 40mm

Field of view: 55mm (2.2")  
Max gap & flush: 25mm (1")  
RET resolution: 24 $\mu$  (0.0010")



### 4. WIDE ANGLE: 80mm

Field of view: 90mm (3.5")  
Max gap & flush: 50mm (2")  
RET resolution: 40 $\mu$  (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)






## HEAD MOUNT

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

## CONTROLLER TO HEAD MOUNT CABLES

Length	3000mm
Connector type	LEMO locking connectors

## COMPATIBLE PC SOFTWARE

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

## POWER SUPPLY

Product code	GG04016
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?

CALL : +44 (0)3333 443 000

EMAIL : [info@third.com](mailto:info@third.com)

VISIT : [www.third.com](http://www.third.com)



[@thegapgun](https://twitter.com/thegapgun)



[ThirdDim](https://www.facebook.com/ThirdDim)

Vectro systems are designed,  
developed and manufactured by:

**THIRD DIMENSION**  
ADVANCING MANUFACTURING

Authorised dealer