

## Willrich Precision Ph 866-945-5742 email sales@willrich.com

# **EQUAT** <sup>C</sup> **R**<sup>™</sup> the versatile gauge<sup>™</sup> SP25 with MODUS<sup>™</sup> programming software



## Equator – the versatile gauge

The Renishaw Equator is a versatile alternative to custom gauging, offering inspection of an unprecedented variety of manufactured parts. The Equator gauge is:

- a comparator for medium to high volume gauging;
- robust proven on the shop-floor and thermally 'insensitive' – re-zeroed using the principle of mastering;
- able to switch between multiple parts and capable of rapid re-programming for design changes;
- capable of form measurement for full feature analysis using the SP25 probe, with rapid repeatable scanning;
- plug and play rapid set-up requiring only single phase power and no air supply.

## System features Working volume

Comparison uncertainty*
Maximum scanning speed
Fixturing requirement*
Air supply
Electrical supply

XY Ø300 mm Z 150 mm ±0.002 mm 100 mm/s ±1 mm No air required Single phase 100-240 V

\* Please refer to the specifications on the back page of this document.

## **Programming software**

## **Automation**

#### MODUS<sup>™</sup> – programmer system software

MODUS Equator<sup>™</sup> is a powerful metrology software package developed by Renishaw, enabling programmers to create and run DMIS part programs on Equator 300. It provides a comprehensive suite of 3-dimensional metrology functions, delivered via an intuitive user interface that features full graphical display of measurement routines. Wizards provide a quick and easy way to specify common measurement tasks, ensuring good practice is applied.

- flexible part programming programs can be developed offline from CAD data, or in 'teach' mode using a joystick.
- fast report creation with clear, concise graphics.
- reporting of multi-part inspection.



## **Equator Controller**

The Equator Controller is a versatile machine controller capable of driving the Equator at high speed and with high repeatability. The controller allows the real time machine control to run alongside the metrology software interface. It uses the proven UCCserver software to allow for easy setup and use of the system, and implements the powerful I++ command protocol.



#### EZ-IO kit

The Equator<sup>™</sup> EZ-IO kit is designed for automation integrators, to provide easily-configured communications between the Equator and a variety of equipment in automated work-cells. Equator is typically integrated with part loading, performed by a robot or shuttle system.

The EZ-IO kit includes EZ-IO software, which runs on the Equator Controller, and one Equator Machine I/O (Input/Output) interface unit. The easy to use EZ-IO software forces a predefined handshaking protocol between Equator and automation equipment, connected via 16 digital I/O lines. The master cell controller (often the robot) selects the appropriate DMIS program if the cell handles a variety of parts, and signals to start the inspection process. Equator, acting as a slave, typically communicates that:

- it is ready to accept parts;
- gauging has been completed;
- the part can be unloaded;
- whether the part has passed or failed.

An additional I/O interface can be purchased for each installation if a larger number of DMIS programs need to be selected.

