

XR20-W rotary axis



A better solution for today's machines

- Simpler and quicker set up and operation
 - · Rapid mounting and alignment
 - Wireless technology
 - Multiple mounting options
 - New software



If you are familiar with the Renishaw RX10 rotary axis calibrator then you already appreciate its accuracy, repeatability and automatic operation.

The new XR20-W keeps all these features but adds greater flexibility, simpler set up and operation and quicker overall testing.

The basis of measurement is exactly the same as with RX10; it's just updated to use the latest technology, minimising training issues. The new design and software translate into reduced time before and during testing. Quicker testing means less downtime, something that's important whether you are an end user, machine OEM or service provider.

Simpler and quicker set up and operation

- Simplified set up and alignment due to separate mounting ring, relaxed centration requirement (no need to use dial gauge) and in-built retroreflectors and alignment aids. No coupling lift during calibrator rotation
- Multiple mounting options. The kit includes options for table mounting and adaptors for chuck mounting in lathes. Together these mean that XR20-W can be easily applied to a far wider range of axes than RX10. In addition its small size and weight allows single handed location and locking into the mounting ring
- NO wires and no separate controller/interface. Bluetooth® wireless technology and battery operation simplifies connection to PC (no separate interface or configuration). It also ensures quicker and easier set up on the machine, with no cable management issues and an operating range greater than the cabled interface used with RX10
- Single configuration of the XR20-W whatever the test orientation

- Completely new and user friendly data capture software has preset test templates for the most popular tests (ISO and ASME).
 Extensive use of defaults and 'auto completes' makes for easier testing and many users will not even need to access the 'hidden' menus for the advanced functions
- Auto calibration cycle prior to test start eliminates errors due to optics manufacturing variance and initial angular misalignments.
- During initial test overrun software validates rotary axis feedrate and direction sense
- Faster maximum rotation speed (10 rpm Vs 3 rpm) further reduces test times compared to RX10

Other benefits

- Durable steel mounting ring less prone to clamp and bolt down damage and swarf pick-up. The separate ring minimises risk of damage to XR20-W during set-up
- The lack of heavy mechanical parts minimises wear issues and modern electronics offer increased reliability
- No wires means that there's no chance of cables snagging which can give faulty measurements or result in a failed test. It also eliminates a safety hazard
- The supplied Peli[™] system case provides robust protection but the system is still smaller and lighter than the RX10 and far easier (and more economical) to transport
- Backwards compatibility with most existing RX10 custom fixturing





XR20-W kit includes:

- XR20-W
- Mounting ring
- Adaptor plate
- Centration aid
- · Chuck adaptor
- Rotary software kit including: RotaryXL data capture software, XCal-View data analysis software and system manual
- · Battery charger
- Batteries x 3
- USB cable and mains adaptor
- Peli[™] case



RX10 to XR20-W upgrade offer

- Renishaw wants to see as many users as possible benefit from the great new features of the XR20-W system. To make your purchasing decision a lot easier we are offering some really great trade-in discounts for current RX10 users, even non functional systems may qualify.
- If you factor in the cost of repairing or recalibrating your current RX10 and the added value you can get from operating an XR20-W (more applications and greater productivity) then you really should be contacting your local Renishaw office or distributor today for a quotation.



System comparison **RX10** XR20-W Weight and dimensions Weight and dimensions Height Height 130 mm 146 mm Diameter (excluding motor) 100 mm 100 mm Diameter Diameter of mounting plate Diameter of mounting ring 150 mm 150 mm Weight (RX10) 4.75 kg (Kit) 10 kg Weight (XR20-W) 1.2 kg (Kit) 6.25 kg Performance Performance Indexer accuracy (from mean value) Measurement accuracy (zero at 0°) ±1 arc sec ±1 arc sec up to 25 revolutions Angular target range 1 revolution Angular target range Max axis rotation speed (<5° axis rotation) Unlimited Max axis rotation speed (<5° axis rotation) Unlimited Max axis rotation speed (>5° axis rotation) Max axis rotation speed (>5° axis rotation) 10 rpm 3 rpm Required centration Required centration ±1 mm ±0.5 mm Cable length 5 metres Bluetooth range Typically 5 to 10 metres **Features** Additional features Class leading accuracy and repeatability • Separate mounting plate with modular · Fully automatic operation of test data capture mounting options and visual centration System auto calibration cycle minimises set-up Integrated retroreflector targets and optical alignment errors · Integrated alignment aids · Hirth coupling for calibrator indexing · Same mounting for all orientations · Bluetooth wireless technology Battery operated • Motor and encoder controlled rotation (in place of Hirth coupling)

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Contact Renishaw and upgrade to XR20-W today

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