

Go cableless!

Unrestricted tool setting and inspection for machine tools



The twin probe optical system - improve part quality and reduce set-up times!

The Renishaw twin probe system allows a *spindle probe* and a *tool setting probe* to be installed on a machine with a *single optical interface*.

The new **OMI-2T** optical interface enables two probes to be used, typically, this would be Renishaw's new **OTS** tool setter and **OMP40-2** inspection probe.

The **OMI-2T** optical interface utilises Renishaw's modulated optical transmission, thereby offering the highest level of resistance to light interference. The **OMI-2T** is also used to activate either the spindle probe or tool-setting probe and gives visual indication of the activated device.

For broken tool detection and rapid tool length/diameter measurement use the new **OTS**, Renishaw's first tool setting probe with optical transmission. The robust, compact and cable-free design allows freedom of table movement, ideal for twin pallet or rotary table machines.

Also take advantage of the new **OMP40-2** inspection probe with modulated transmission, a truly compact probe system that can be used to automatically carry out on-machine component setting and inspection.

Or, as the **OMI-2T** can control two probes, choose any modulated spindle probe to work with **OTS** to best suit your machining application.



Different probe combinations

Flexible twin probe system configurations, using one receiver and two probes, can provide an easily integrated solution for most on-machine inspection applications.



Cable free tool-setting

Cable free operation of the new **OTS** is ideal for easy installation and keeping a tidy machine environment - ideal for compact machining centres and rotary table or twin pallet machines.



Fast and accurate set-up/inspection

Invest in automatic on-machine component and tool inspection to save time and reduce scrap, enabling you to become more competitive in your market.

Specification - OMP40-2 spindle probe

Principal application	Very small machining centres and drill/tap machines
Dimensions	Length: 50 mm (1.97 in) Diameter: 40 mm (1.57 in)
Transmission type	360° infra-red optical transmission (modulated or legacy)
Operating range	Up to 5 m (16.4 ft)
Receiver/interface	OMI-2T
Sense directions	Omni-directional: $\pm X$, $\pm Y$, $+Z$
Uni-directional repeatability	1.0 μm (0.00004 in)
Trigger force	5.85 N, 585 gf (20.63 ozf) (Z plane factory set)
Stylus overtravel	XY plane $\pm 12.5^\circ$ +Z direction 6 mm (0.24 in)
Battery type	1/2 AA Lithium Thionyl Chloride (3.6 V) x 2
Battery life	stand by 250 days 5% usage 85 days continuous life 140 hours
Sealing	IPX8



Specification - OTS tool setting probe

Principal application	Tool length and diameter checking on vertical machining centres
Dimensions	Length: 119 mm Height: 93 mm
Transmission type	Directable infra-red optical transmission
Operating range	Up to 5 m (16.4 ft)
Receiver/interface	OMI-2T
Sense directions	Omni-directional: $\pm X$, $\pm Y$, $+Z$
Uni-directional repeatability	1.0 μm (0.00004 in)
Stylus overtravel	XY plane ± 3.5 mm +Z direction 6 mm (0.23 in)
Battery type	1/2 AA Lithium Thionyl Chloride (3.6 V) x 2
Battery life	stand by 180 days 5% usage 100 days continuous life 300 hours
Sealing	IPX8



Specification - OMI-2T interface/receiver

Principal application	Combined optical transceiver/interface, which conveys and processes signals for two different probes sequentially
Dimensions	Depth: 46.7 mm (1.84 in) Diameter: 84 mm (3.30 in)
Power supply	12 V to 30 V d.c.
Sealing	IPX8
Turn ON/OFF control	2 pairs of 'M' code outputs to control required probe
Output	2 x status SSR (simultaneous) error SSR low battery SSR



More information

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For worldwide contact details please visit our main website at www.renishaw.com/contact

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