

TONiC™ encoder system



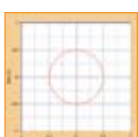
Auto-phase *IN-TRAC*™ optical reference mark

Thermally stable, bi-directional reference mark



High speed and fine resolution

10 m/s maximum speed and resolutions to 5 nm



Small and reliable readhead

Auto Gain Control (AGC) ensures solid, high quality signals

TONIC™ is Renishaw's latest super-compact optical encoder, offering exceptional performance and versatility with refreshing simplicity.

TONIC™ takes the successful concepts of Renishaw's proven range of high speed non-contact optical encoders to new levels of performance and usability. Both the linear and rotary versions of **TONIC™** offer exceptional speed, accuracy, stability and reliability with a low cost of ownership and unrivalled simplicity.

For ultimate flexibility, **TONIC™** reads a variety of linear and rotary scale types including a new version of Renishaw's gold tape scale featuring the *IN-TRAC™* optical reference mark. With the auto-phase *IN-TRAC™* optical reference mark, auto-calibration and integral diagnostic LEDs, installation could not be easier – **TONIC™** can be set-up and running with maximum performance and minimum fuss in a matter of seconds. Reliability is assured with Renishaw's proven filtering optics which can withstand dust, scratches and even light oils on the scale.

Signal purity and stability are further enhanced by dynamic signal processing incorporated within the readhead, providing Sub-Divisional Error of better than ± 30 nm.

Whether you are looking for performance or features, high-speed or high-accuracy, linear or rotary, **TONIC™** does it all – without compromise.

- High speed non-contact encoder system
- Rotary and linear versions available
- Customer selectable *IN-TRAC™* optical reference mark available on a variety of scale types
- **New!** Flexible gold scale featuring *IN-TRAC™*
- Resolutions to 5 nm
- Capable of >3.24 m/s @ 0.1 μ m resolution (max 10 m/s)
- Ultra-low Sub-Divisional Error $<\pm 30$ nm
- Now with dynamic signal processing inside the head
- Temperature of operation up to 70°C
- WEEE and RoHS compliant
- Analogue 1 V_{pp} direct from the readhead or digital output from 15 pin D-type housing with interpolation and diagnostics
- Two integral diagnostic LEDs on the readhead simplify set-up
- Integral dual limits



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