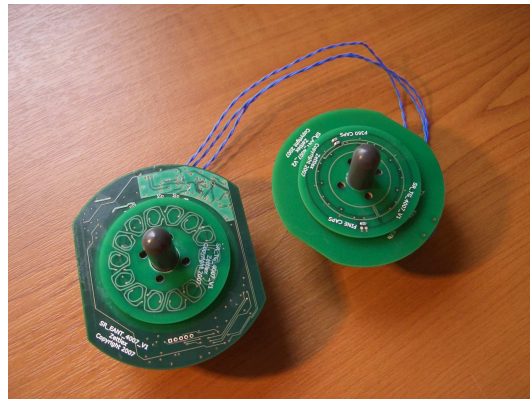


Product Guide

Tandem Rotary Transducer

Type 4007-OEM



No contacts, no bearings, no bushes, no fine wires....just reliable measurements all day, every day.

Zettlex transducers are **non-contacting, absolute** position measuring devices. They utilise a unique inductive technique and comprise two main components – a Target and an Antenna. The Antenna is powered and the Target is passive. An electrical output from the Antenna shows the position of the Target relative to the Antenna.

The 4007 unit is a **tandem pair** of unpackaged (OEM) transducers for **precision measurement of rotary position in 2 axes**. A digital data stream delivers position information for both axes in a single output channel.

The Targets & Antennae can simply be screwed to a host product such as a robotic arm, gimbal system, pan & tilt system etc. The transducers are ideally suited to harsh environments where electrical contacts or optical transducers would prove unreliable. **Precise mechanical mounting is not required and operation is unaffected by condensation or dust.**

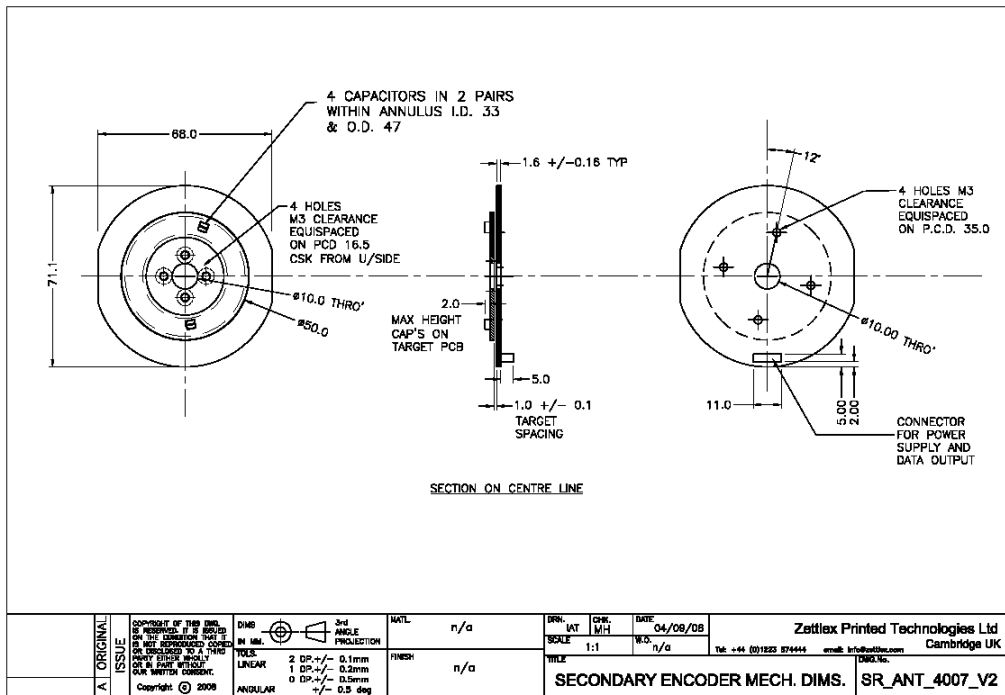
Custom versions are available for OEMs with alternative temperature ranges, mechanical mounts, finer linearity etc. - simply contact Zettlex for further details.

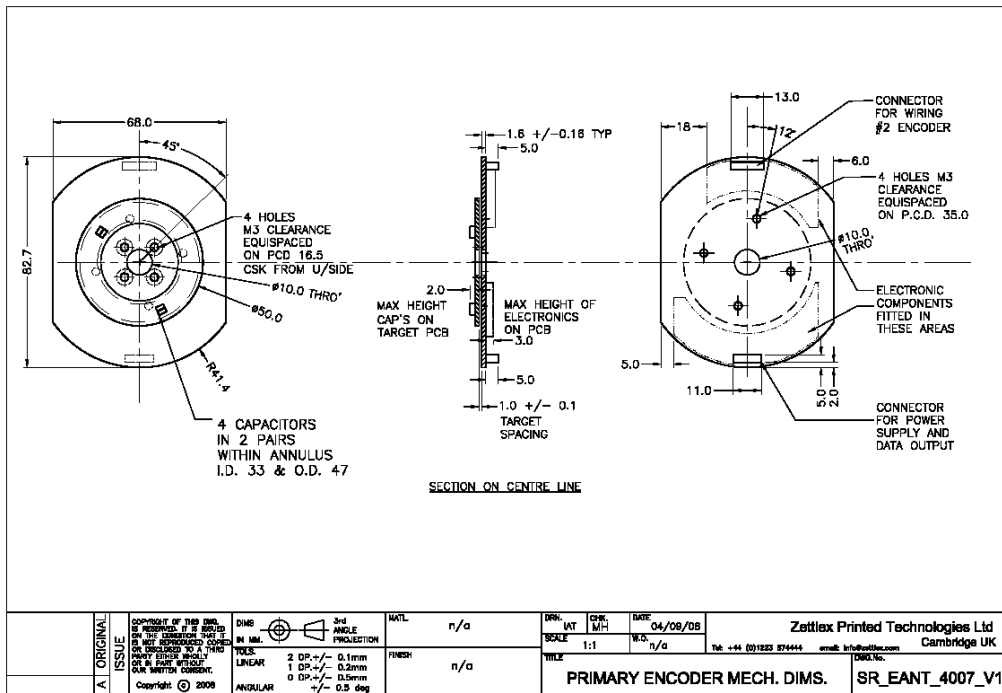
Outline Specification

Output signal	Digital Data at 9600 Baud
Full-scale	360 degrees continuous
Measurement type	Absolute
Resolution	14 bit
Repeatability	+/- 1 LSB
Linearity	<0,05%
Measurement frequency	200Hz per transducer (400Hz total)

Operating temp. range	-40 to 85°C (125°C available as an option)
Power supply	5V and <50mA at 100% duty cycle
EMC	EN50082-2 & EN55011 Group 1, Class A
Temperature coefficient	<20ppm/K
Connector	Header block
Ingress protection	IP00 – however, all electronics are conformally coated so that temporary immersion in liquid will not effect operation.
Over voltage protection	Not provided
Reverse polarity protection	Not provided
Mounting Method	M3 C/sk Nylon Screws
Comms Protocol	9600 Baud, 8 Bit Data, 1 Stop Bit, No Parity, No Flow-Control. Full details on request.

Dimensions





Note - other than the central through shaft, electrically conductive or magnetically permeable objects should not be located within 4mm of the main faces of the Target & Antenna during operation.

Recommended installation is to align the unit using the main through shaft of the host and screw the antenna & target in place.

Wiring

Terminal 1	GND
Terminal 2	DATA
Terminal 3	5V

Ordering code

4007 - OEM

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