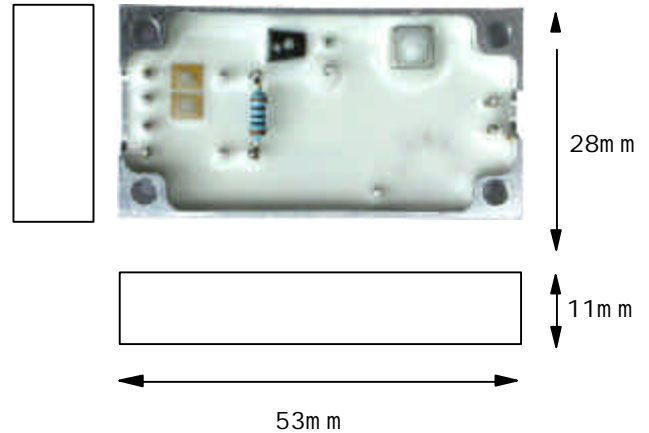
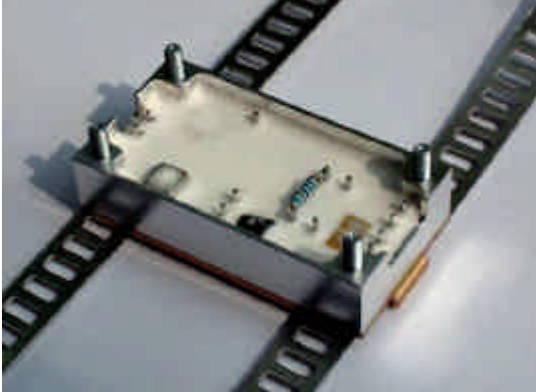




ASTECH ELECTRONICS LTD PRODUCT DATA

ROTARY TELEMETRY TRANSMITTER TX31D/1/IFM



The new TX31D/1/IFM transmitter is for general purpose applications and is available for strain gauge and thermocouple applications. Reference-junction compensation and linearization is incorporated in the transmitter firmware. Range and thermocouple type is to customer requirement. Input scaling for the strain version is set by a single resistor.

Power supply may be by inductive or battery - a matching battery unit BU31 is available. In addition to the measurement data, the TX31D also transmits the power supply voltage and reference junction temperature to enable convenient monitoring at all times. For the strain gauge version, a remote calibration facility is incorporated, operated by a push button on the decoder unit.

In construction the transmitter circuitry is encapsulated in epoxy-resin within a rectangular housing precision machined from aluminium. Isolation from the inductive power supply and other interference source is provided by a close fitting metal screening fabricated in high-permeability metal. A slotted baseplate simplifies attachment using the CAK kit steel strapping.

TX31D/1/IFM Specifications

Input:	1 channel full bridge strain gauge "Instrumentation Amp" input or ground referred chopper amplifier for thermocouple version. Series and common-mode input resistance 20 M ohms. Input bias current 1 nA. Strain input sensitivity set by single user accessible resistor. Range 0.1 mV to 500 mV full scale. Thermocouple range and type user specified
Bridge Excitation Supply:	4.096VDC \pm 1% over full operating temperature range. Voltage temperature coefficient typically 20 ppm / °C. Maximum bridge output current 40 mA. Short circuit protected.
Zero Shift with Temperature:	Typically 0.03 %/°C.
Resolution & Accuracy:	11 bits plus sign, 0.1% full range.
Operating Temperature Range:	-20 °C to +85 °C. Extended range to special order.
Power Requirement:	6 - 12 VDC @ 9 mA plus bridge current.
Dimensions:	52 mm x 27mm x 11 mm
Weight:	Transmitter only 24 grams. With strapping plate and mu metal cover 56 grams
Construction:	Encapsulated in epoxy resin within machined aluminium housing