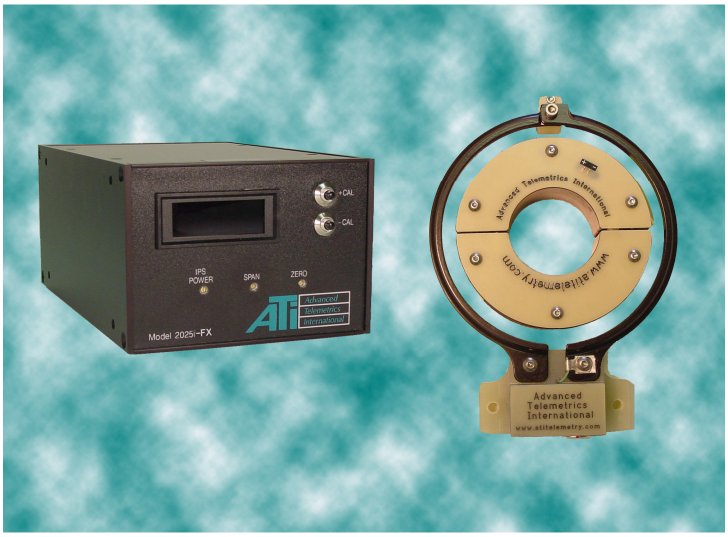
ATi 2000 SERIES
Radio Telemetry System

ROTATING TORSIONAL VIBRATION MONITORING SYSTEM

INDUCTION or BATTERY POWERED

Clamp-On, Telemetry-Coupled Vibration Collar Facilitates Quick Installation

The *ATi* ***Torsional Vibration Monitoring System*** transmits torsional acceleration from a rotating shaft, **while the system is running**. The system consists of a rotating collar and a receiver. The rotating collars are available to clamp on to most any shaft size. Single piece versions are also available. The collar contains two embedded accelerometers mounted 180 degrees apart. The output from the accelerometers is processed prior to being transmitted by the 2043BCX Transmitter to a stationary receiver.



The output from the accelerometers is processed, such that gravitational effects are cancelled, permitting high sensitivity measurements.

Power is supplied to the Transmitter Inductively for continuous, non-interrupted measurements. No batteries are required because the IPS delivers power through a stationary loop antenna to a rotating antenna. Battery-powered collars are also available. The rotating loop antenna and Induction Power Converter are embedded into the Model 2010i Collar Assembly. The receiver includes a digital backlit LCD display and analog outputs. The unit can be powered from 12 VDC or 120 VAC.

Each system comes complete with all required accessories. This includes antennas, AC power adapter or DC power cord for Receiver, and all required cables.

FEATURES

- No Slip Rings
- No Shaft Modifications Required
- Integral Accelerometers, no sensor connections.
- Clamp-on Collar houses Transmitter and Induction Power Converter. Contains embedded transmitting antenna
- Transmits Sensor Signals via Radio Transmitter to a Stationary Receiver
- Immune to electromagnetic interference, dust, oil, moisture, etc.

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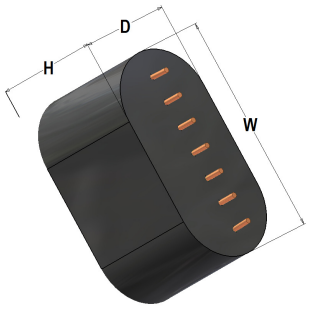
Specifications

SYSTEM

Bandwidth ..... DC to 6.5 KHz
filtered output: DC to 100 Hz
Integral Non-Linearity ..... +/- .10%
Repeatability ..... +/- .05%
Maximum Error ..... <.25% Full Scale

RECEIVER: Model 2025i, 2025iR

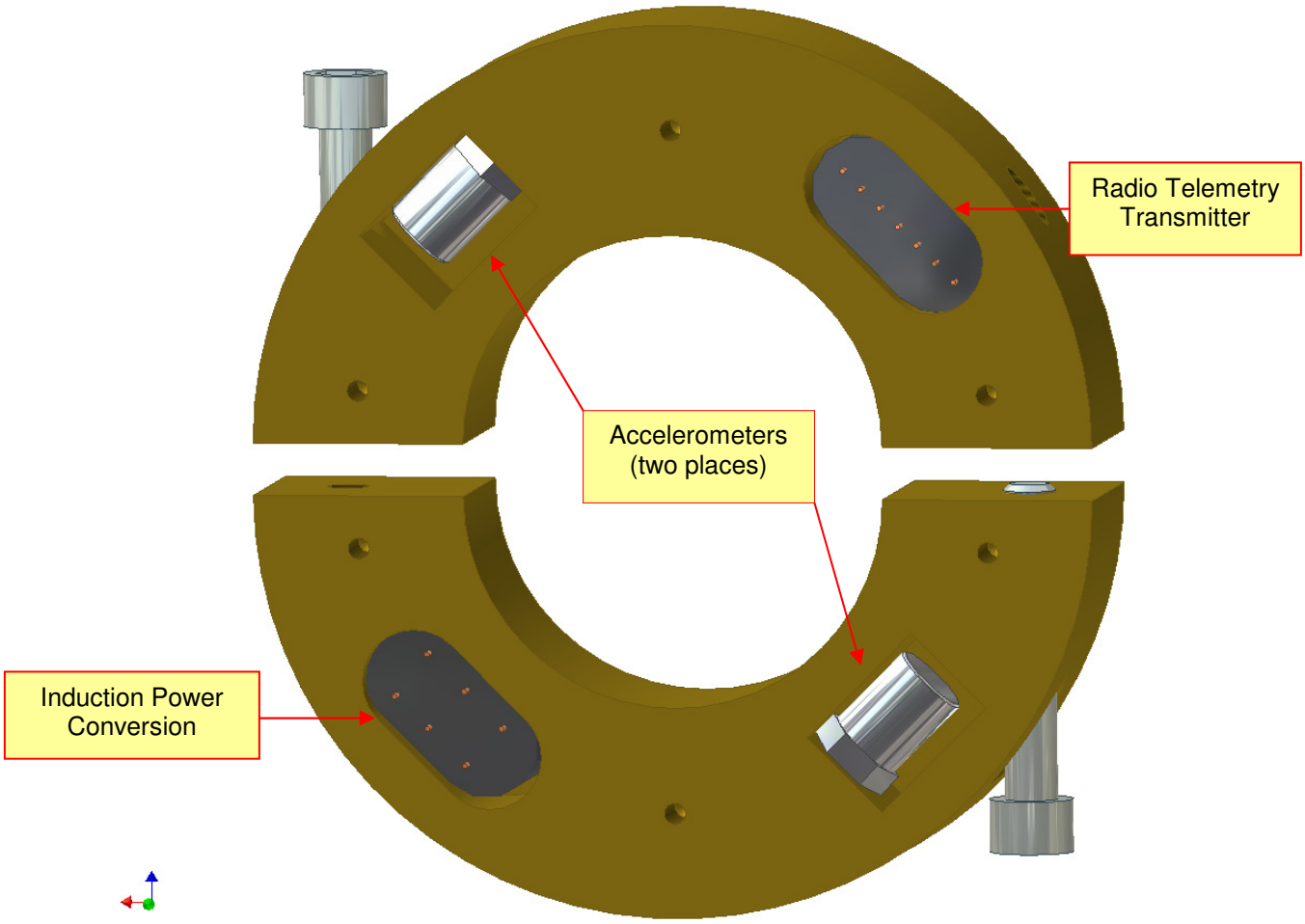
Power ..... 120 Volts AC
and 12 Volts DC
Output ..... 0-2, 5, 10; ± 2, 5, 10 VDC
..... (0-20, 4-20 mA Optional)
Display ..... 3½ Digit Backlit LCD
Output Ripple ..... < 2 mV (Filtered)
< 15 mV (Wide Band)
8 pole Butterworth Filter
Size ..... 8.0"L x 5.0"W x 3.48"H
Induction Power.....500kHz



Additional Transmitter molds/sizes available.

Model 2043BCX Miniature Dual Summing Acceleration Transmitter

Power .....9 Volts or Induction Power
Acceleration Limit ..... 32,000g Static
(125g Dynamic, DC -1 kHz)
Zero Drift ..... .02% / Deg C
Span Drift ..... .02% / Deg C
Operating Temperature Range: -40 to 140 Deg C
Size.....1.0"H x .68"D x 1.47W
Excitation.....2mA constant current



Model 2010i-AC Split Collar Assembly

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