



**NEW!**

# Dual Output Vibration Sensors

Designed to provide simultaneous monitoring of two data points from one sensor

## Highlights

- Choice of:
  - ICP® accelerometer with temperature output option (TO)
  - Vibration transmitter with temperature output option (TO)
  - Vibration transmitter with raw vibration output option (RV)
  - Vibration transmitter with raw vibration velocity output option (RVVO)
- Top and side exit as well as integral polyurethane and armored cable versions available.
- Multi-pin connector allows for simple transfer of both output signals.
- Ideal for applications where there is a need for multiple simultaneous sensor measurements without monitoring equipment redundancy.



## Typical Applications

- Motor Monitoring and Protection
- Gearbox Condition Monitoring
- Pump Predictive Maintenance

Dual output sensors offer an affordable solution for applications where simultaneous monitoring of two different data points is required without redundancy in monitoring equipment. The provision of the second set of data gives the vibration analyst additional information to assist in the detection and trending of equipment condition and performance in order prevent unscheduled downtime and/or catastrophic equipment failure.



# Dual Output Vibration Sensors



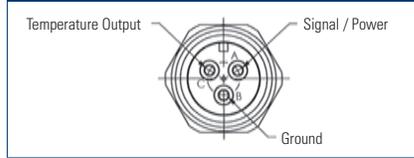
## ICP® Accelerometer with Temperature Output Option

Dual output ICP® accelerometers with a temperature output option simultaneously measure vibration and temperature levels. The temperature output is a 0 to 1.2 VDC output scaled from +36 to +250 °F with a 5.56 mV/°F + 32 °F sensitivity. The temperature sensor, located mid-level in the housing and monitoring internal sensor temperature, draws its power from the vibration electronics and can only be read when ICP® power is being applied to the vibration leads. All models have a three-pin connector to allow for easy transfer of both data signals to a multi-channel data acquisition system for further analysis.

ICP® accelerometers available with a temperature output option are:

- TO602D00/TO602D01
- TO(M)603C01/TO603C02
- TO603C11/TO603C61
- TO607A01/TO607A11/TO(M)607A61
- TO(M)608A11
- TO622A01
- TO624B01

**Connection Diagram for 3-Pin Connector**



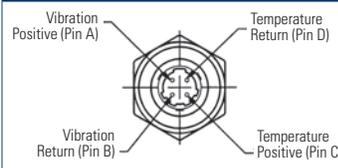
## Vibration Transmitter with Temperature Output Option

Dual output vibration transmitters with a temperature output option simultaneously measure vibration and temperature levels. The temperature output is a 4-20mA signal that has a measurement range of -40 to +257 °F. The temperature sensor is located mid-level in the housing and monitors the internal sensor temperature. The same power supply can be used for both 4-20 mA loops by connecting both positive terminals directly to the power supply. Models without an integral cable have a four-pin connector while models with an integral cable have a four-wire pigtail.

Vibration transmitters available with a temperature output option are:

- TO640B11/(EX)TO640B30
- TO640B31/TO640B32/TO640B61
- (EX)TO641B31/TO641B32
- TO646B10/TO646B32

**Connection Diagram for 4-Pin Connector**



**Connection Diagram for 4-Wire Pigtail**

Wire Color	Connection
RED	Vibration Positive
BLACK	Vibration Negative
GREEN	Temperature Negative
WHITE	Temperature Positive

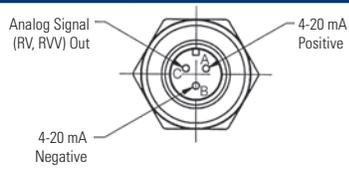
## Vibration Transmitter with Raw Vibration or Raw Vibration Velocity Output Options

Dual output vibration transmitters with a raw vibration output option simultaneously measure vibration and raw vibration. Dual output vibration transmitters with a raw vibration velocity output option simultaneously measure vibration and raw vibration velocity. The raw vibration output is a 100mV/g signal ( $\pm 20\%$ ) while the raw vibration velocity output is a 100mV/IPS ( $\pm 20\%$ ). Both outputs have a frequency range of 1-10,000 Hz and a maximum amplitude of 15g pk. The same power supply can be used for both 4-20 mA loops by connecting both positive terminals directly to the power supply. Models without an integral cable have a three-pin connector while models with an integral cable have a four-wire pigtail.

Vibration transmitters available with a raw vibration output option are:

- RV640B01/EXRV640B02
- (EX)RV641B00/(EX)RV641B01
- RV641B02/RV641B11/RV641B60/EXRV641B71
- RV642A01
- EXRV643A01
- RV646B02

**Connection Diagram for 3-Pin Connector**



**Connection Diagram for 4-Wire Pigtail**

Wire Color	Connection
RED	Vibration Positive
BLACK	Vibration Negative
GREEN	RV/RVVO Negative
WHITE	RV/RVVO Positive

Vibration transmitters available with a raw vibration velocity output option are: ■ RVV0640B01



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IMI Sensors designs and manufactures a full line of accelerometers, sensors, vibration switches, vibration transmitters, cables and accessories for predictive maintenance, continuous vibration monitoring, and machinery equipment protection. Products include rugged industrial ICP® accelerometers, 4-20 mA industrial vibration sensors and transmitters for 24/7 monitoring, electronic and mechanical vibration switches, the patented Bearing Fault Detector, high temperature accelerometers to +1300 °F (+704 °C), 2-wire Smart Vibration Switch, and the patented Reciprocating Machinery Protector. CE approved and intrinsically safe versions are available for most products.

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