

# **CONMONS**ense Range

4-20mA & 0-10V Heterodyne Sensors



Contact or structure, Airborne open, Airborne enclosed

CONMONSense Range is a Standalone, Permanent Mount, Ultrasound Sensor designed to integrate with

standard industrial measurement systems. CONMONSense delivers precise, repeatable data about the health

4-20mA and 0-10V output, per each output, 3 sensors are available:

Its resonant piezo element is optimized for ultrasound driven lubrication, mechanical fault detection, and monitoring the health of valves, steam, hydraulic systems and electrical defects.

CONMONSense sensors can be used in multiple applications:

- Contact/structure (IP65) for bearings lubrication, valves, steam traps, hydraulics systems and rotating assets inspections, even the slowest ones.
- Airborne open (IP40) and enclosed (IP65) for inspection of electrical systems.

of your assets and electrical systems also in the most challenging environment.

Ultrasound is a true measure of the FITness of your facility. Most assets produce FRICTION, IMPACTING, and TURBULENCE as defect indicators. CONMONSense hears these phenomena at their inception and delivers an analog signal response to your connected measurement system.

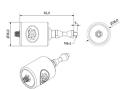
With an output range from 4-20mA or from 0-10V, CONMONSense mounts permanently to any asset to provide continuous condition monitoring data.

Avoid unplanned downtime and put the safety of your plant and colleagues first.

## **SPECIFICATIONS**

#### 4-20mA Contact Sensor IP65 / 0-10V Contact Sensor IP65:

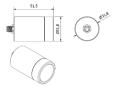
- Static or dynamic output;
- · Onboard amplification stages;
- Non-volatile memory (used to save configuration and recover sensor state/mode upon power outage);
- Hardware calibration;
- Unique ID;
- Digital I/O communication for simple use;
- Serial communication for advanced use.



Technical data:			
Weight	126 Gram / 4.44 oz	Gain range	0 [dB] to 60 [dB]
IP rating	65	Gain step	12 [dB]
Power supply	10 [V] to 30 [V]	Connector size	M8 - 4 pin
Operating t°	-20 [°C] to +85 [°C] / -4 [°F] to +185 [°F]	Heterodyne frequency	38.5 [kHz] +/- 10%
Pinout voltage	GROUND to VDD	Bandwidth	[0.25 - 4] [kHz]
Resonant frequency	37 [kHz] +/- 1 [kHz]	RMS time period	1 [s]

#### 4-20mA Airborne Sensor IP65 / 0-10V Airborne Sensor IP65:

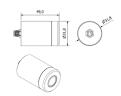
- Static or dynamic output;
- · Onboard amplification stages;
- Non-volatile memory (used to save configuration and recover sensor state/mode upon power outage);
- Hardware calibration;
- Unique ID;
- Digital I/O communication for simple use;
- Serial communication for advanced use.



Technical data:			
Weight	82 Gram / 2.9 Oz	Gain range	0 [dB] to 60 [dB]
IP rating	65	Gain step	12 [dB]
Power supply	10 [V] to 30 [V]	Connector size	M8 - 4 pin
Operating t°	-20 [°C] to +70 [°C] / -4 [°F] to +158 [°F]	Heterodyne frequency	38.5 [kHz] +/- 10%
Pinout voltage	GROUND to VDD	Bandwidth	[0.25 - 4] [kHz]
Resonant frequency	40 [kHz] +/- 1 [kHz]	RMS time period	1 [s]

#### 4-20mA Airborne Open Sensor IP40 / 0-10V Airborne Open Sensor IP40:

- Static or dynamic output;
- · Onboard amplification stages;
- Non-volatile memory (used to save configuration and recover sensor state/mode upon power outage);
- Hardware calibration;
- Unique ID;
- Digital I/O communication for simple use;
- Serial communication for advanced use.



Technical data:			
Weight	82 Gram / 2.9 Oz	Gain range	0 [dB] to 60 [dB]
IP rating	40	Gain step	12 [dB]
Power supply	10 [V] to 30 [V]	Connector size	M8 - 4 pin
Operating t°	-20 [°C] to +70 [°C] / -4 [°F] to +158 [°F]	Heterodyne frequency	38.5 [kHz] +/- 10%
Pinout voltage	GROUND to VDD	Bandwidth	[0.25 - 4] [kHz]
Resonant frequency	40 [kHz] +/- 1 [kHz]	RMS time period	1 [s]

Accessories offered by SDT:				
Cables with straight M8 connector				
FU.RSC.CABL.01.015-1	Sensor-/actor cable m8 4pf <> free end 1.5m/4.9ft - straight shielded			
FU.RSC.CABL.01.030-1	Sensor-/actor cable m8 4pf <> free end 3.0m/9.8ft - straight shielded			
FU.RSC.CABL.01.050-1	Sensor-/actor cable m8 4pf <> free end 5.0m/16.4ft - straight shielded			
FU.RSC.CABL.01.100-1	Sensor-/actor cable m8 4pf <> free end 10.0m/32.8ft - straight shielded			
Cables with 90° M8 connector				
FU.RSC.CABL.02.015-1	Sensor-/actor cable m8 4pf <> free end 1.5m/4.9ft - 90° shielded			
FU.RSC.CABL.02.030-1	Sensor-/actor cable m8 4pf <> free end 3.0m/9.8ft - 90° shielded			
FU.RSC.CABL.02.050-1	Sensor-/actor cable m8 4pf <> free end 5.0m/16.4ft - 90° shielded			
FU.RSC.CABL.02.100-1	Sensor-/actor cable m8 4pf <> free end 10.0m/32.8ft - 90° shielded			

#### **OUR MISSION:**

SDT provides ultrasound solutions that help our customers gain a better understanding about the health of their assets. We help them predict failures, control tightness, optimize energy costs, and improve product quality while contributing to the overall reliability of their organization.



### SDT International s.a./n.v.

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7677 County Road 2 Cobourg ON K9A 0X4 (Canada) Phone: 1-800-667-5325 / 1-905-377-1313 Email: hearmore@sdtultrasound.com The CONMONSense sensor is part of the SDT products range that combines robustness and high performance. It is available through our worldwide authorized distributors network.