IP65   IP65   IP40

IP65   IP65   IP40

CONMONSense range includes standalone sensors with both 4-20mA and 0-10V standard output. 3 types are available: 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 of your assets and electrical systems also in the most challenging environment.

Its internal design 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) mainly for inspection of electrical systems and leak detection.

Ultrasound is a true measure of the FITness of your facility. Most assets produce FRICTION, IMPACTING, and TURBULENCE as defect indicators. CONMONSense captures these phenomena at their inception and delivers an analog response (signal or RMS value) to your 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. The 0-10V sensor ouputs are directly compatible with the VIGILANT system powered by SDT.

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 (RMS value) or dynamic (heterodyned signal) output
- Onboard amplification stages
- Built-in analog filters
- Hardware calibration
- On board ambient T° measurement (through serial communication)
- Non-volatile memory (used to save configuration and recover sensor state/mode upon power outage)
- Unique ID
- Digital I/O communication for simple use
- Serial communication for advanced use
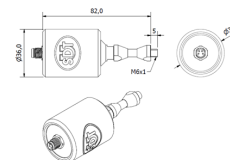
Technical data:

Weight	126 g / 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] +/- 1 [kHz]
Pinout voltage	GROUND to VDD	Bandwidth	[0.25 – 4] [kHz], image of the ultrasonic signal
Resonant frequency	37 [kHz] +/- 1 [kHz]	RMS time period	1 [s] (static mode only)

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

- Static (RMS value) or dynamic (heterodyned signal) output
- Onboard amplification stages
- Built-in analog filters
- Hardware calibration
- On board ambient T° measurement (through serial communication)
- Non-volatile memory (used to save configuration and recover sensor state/mode upon power outage)
- Unique ID
- Digital I/O communication for simple use
- Serial communication for advanced use
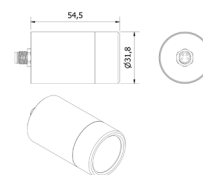
Technical data:

Weight	102 g / 3.6 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] +/- 1 [kHz]
Pinout voltage	GROUND to VDD	Bandwidth	[0.25 – 4] [kHz], image of the ultrasonic signal
Resonant frequency	40 [kHz] +/- 1 [kHz]	RMS time period	1 [s] (static mode only)

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

- Static (RMS value) or dynamic (heterodyned signal) output
- Onboard amplification stages
- Built-in analog filters
- Hardware calibration
- On board ambient T° measurement (through serial communication)
- Non-volatile memory (used to save configuration and recover sensor state/mode upon power outage)
- Unique ID
- Digital I/O communication for simple use
- Serial communication for advanced use
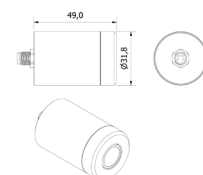
Technical data:

Weight	135 g / 4.8 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] +/- 1 [kHz]
Pinout voltage	GROUND to VDD	Bandwidth	[0.25 – 4] [kHz], image of the ultrasonic signal
Resonant frequency	40 [kHz] +/- 1 [kHz]	RMS time period	1 [s] (static mode only)

Accessories offered by SDT:

Cables with Straight M8 Connector – PUR RAL7021 -25°C.+90°C IP65 – Straight shielded	Cables with 90° M8 Connector – PUR RAL7021 -25°C.+90°C IP65 – Shielded	Cables with straight M8 connector 4PM <> M8 4PF – PUR BLACK -25°C.+80°C IP65 – Straight shielded	Connector to complete assembly	Mounting accessory	Configuration interface
Sensor-/actor cable m8 4pf <> free end (various sizes available)	Sensor-/actor cable m8 4pf 90° <> free end (various sizes available)	Sensor-/actor cable m8 4pm <> m8 4pf (various sizes available)	Cable connector m8 4pm/4pf shielded straight a-key w/screw terminal	4-20mA Heterodyne Mounting Accessories/ Brackets	Used to adjust mode and gain at installation

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.

HEAR MORE

SDT **Ultrasound Solutions**

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.