SENSATA RESONIX™ REFRIGERANT LEAK SENSOR
RGD SERIES

The Sensata Resonix refrigerant leak detection sensor is a compact embedded module designed to meet demanding OEM requirements and be easily integrated into HVAC & Refrigeration Equipment. Featuring the innovative Speed of Sound technology with high accuracy and fast response times.

Superior resistance to overexposure and poisoning, high temperature and humidity resistance, and a lifetime greater than 15 years with no need to calibrate make the Sensata Resonix the ideal, easy to maintain, solution for HVAC&R systems.

SPECIFICATIONS

- Complies to UL60335-2-40 ed. 4
- Works with R32, R454 series, and R455 series refrigerants
- LFL range: 0 – 100%
- Working temperature -40°C to +85°C

- Working humidity 0 to 100% RH with condensation
- Working pressure 70 to 120kPa
- Protection (EN 60529) : IP54
- Low power: <40 mA (for 5 VDC input)

LONG LIFETIME
15+ years, to withstand the extended lifetime of HVAC equipment

FAST RESPONSE TIME
Fast response (T28=2.5 seconds, T60=5 seconds) and warm up time (<5 seconds).

NO CALIBRATION NEEDED
Factory calibrated sensor that does not require any field calibration or re-zeroing during its lifetime

WIDE OUTPUT OPTIONS RANGE
Modbus RTU (RS-485) output to meet the wide range of OEM applications.

NO FALSE POSITIVES
No false positives from fouling gases as required by UL standards

EMBEDDED SELF DIAGNOSTICS
Sensor completes self-diagnostics once per minute providing fault alarms

HIGH ACCURACY
Temperature and humidity compensation sensors present for high accuracy over environmental conditions

IMMUNITY TO POISONING
Immune to degradation even with continuous poisoning

MECHANICAL AND ENVIRONMENTAL ROBUSTNESS
Robust package that performs throughout the environmental conditions and requirements for industrial HVAC equipment
### Applications

- Residential, commercial and industrial air conditioning and heat pump systems
- Commercial refrigeration

The HVAC industry is converting to refrigerants that are environmentally friendly, energy efficient, and have lower GWP solution such as the R32, R1234yf and blends of those gases. Those refrigerants are classified A2L (ASHRAE classification) which means they are considered flammable at a certain concentration in air. For this reason, manufacturers of residential and commercial air conditioning and heat pump systems must implement a detection and mitigation in their equipment in order to comply to standards ASHRAE-15, UL60335-2-40 and UL60335-2-89.