



APPLICATIONS:

DATA CENTER

ELECTRICAL

HVAC/R

MARINE

POOL & SPA

RV

OVERVIEW

The ICM-A2L-Sensor is engineered to support the HVAC industry's transition to lower Global Warming Potential (GWP) A2L refrigerants while meeting ASHRAE 15 and UL60335-2-40 safety requirements.

The ICM-A2L-Sensor features dual refrigerant sensing capability for the two most commonly used A2L refrigerants, R-454B and R-32. Developed with advanced speed-of-sound sensing technology, the sensor accurately determines refrigerant concentration while changes in resonance frequency are used to identify gas composition.

The robust solid-state design, combined with simplified mounting features, helps improve system safety, reliability, and regulatory compliance in residential and commercial HVAC applications.

FEATURES & BENEFITS

- ✓ Fast response and start-up time
- ✓ Equipped with speed-of-sound technology
- ✓ No calibration or re-zeroing required
- ✓ Immune to household & workplace contamination
- ✓ No false alarms due to fouling gases
- ✓ Recognized by UL60335-2-40 and UL60335-2-89
- ✓ Extra-long six foot wire harness for ease of placement
- ✓ Not a one-and-done solution, this device provides consistent, continuous refrigerant monitoring across the product's 15 year lifespan
- ✓ No chemical reaction or degradation
- ✓ Environmental seal between housing and around sense element to protect electronics from environmental intrusion
- ✓ Tab-free corner mounting design for optimized sensor placement
- ✓ Resistant to harsh HVAC operating environments
- ✓ Factory-set operations with no field recalibration required

COMPATIBLE WITH

Universal A2L mitigation boards like the ICM-UA2L-24C-DUAL Refrigerant Detection System for R32 and R454B



Scan QR Code
for more information



SPECIFICATIONS

Electrical:

- **General Ratings:**
 - **Supply Voltage:** 5 VDC max.
 - **Current:** 30mA max.
 - **Output:** RS-485 with integral connector

Environmental:

- **Target Gases:** R32 + R454B (Dual option)
- **LFL Range:** 0-100%
- **Response Time:** T28 of 2.5s, T60 of 5s (average)
- **Warm Up Time:** <5 seconds
- **Accuracy:** ±5% LFL
- **Working Temperature:** -40°C to 105 °C
- **Storage Temperature:** -40°C to 105 °C
- **Working Humidity:** 0-100% RH (condensing)
- **Working Pressure:** 70 to 120 KPa
- **Protection:** IP54

Mechanical:

- **Dimensions:** 2.28"L x 1.38"H x 0.71W
- **Weight:** 0.11 lbs.
- **Flame rating:** UL 94V-0
- **Environmental Sealing:** EPDM
- **Cable Assembly:** Four-wire 22 AWG