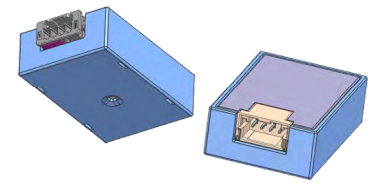


Vehicle Sensing Solutions: Interior Acoustic Noise Cancellation (ANC) Sensors >



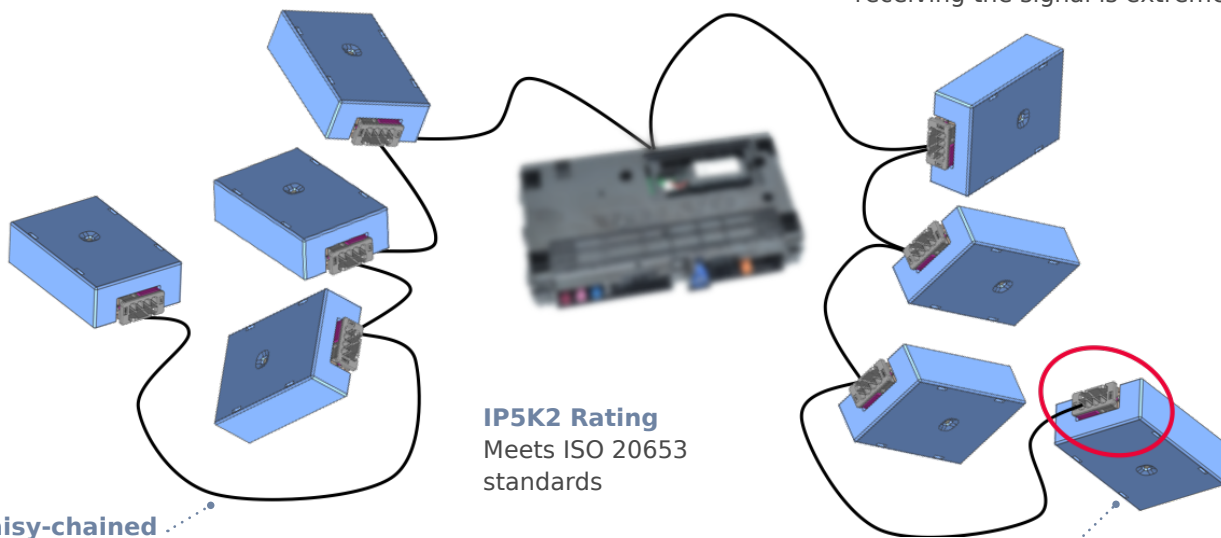
Interior ANC Sensors

Molex Interior ANC Sensors, which is phantom-powered slave units employing differential pairs, convert airborne noise into digital electrical signals that generate a cancellation soundwave to reduce unwanted noise within the vehicle passenger compartment

FEATURES AND ADVANTAGES

Low system latency

Delivers superior noise cancellation because the time between the sensor receiving the excitation and the module receiving the signal is extremely low



IP5K2 Rating
Meets ISO 20653 standards

Daisy-chained sensors

Eliminates heavy star-patterned cabling and reduces harness weight around vehicle

Mates with 1x4 DuraClik Connectors

Provides superior electrical contact reliability, mating retention and space savings compared to competitive versions for high-vibration and high-temperature applications

MARKETS AND APPLICATIONS

Automotive

In-cabin noise reduction
Autonomous vehicles
Advance driver assistance systems (ADAS)



In-Vehicle Cabin



Mechanic Laptop Engine



Future Car

Vehicle Sensing Solutions: Interior Acoustic Noise Cancellation (ANC) Sensors >

SPECIFICATIONS

Microphone Technical

Very low distortion

<1% Total harmonic distortion +
noise @ 1kHz

Sensitivity: 36 +/- 1 dBFS @ 1kHz

Noise floor: 34 dB SPL(A)

High signal-to-noise ratio: 64dB(A)

Omnidirectional

Digital output over 14-bit A2B Analog Device

Mechanical Technical

Connector interface: Molex p/n 5023520401

DuraClik 1x4 Connector:

see Ordering Information

Environmental

Temperature classification: -40° to 85° C

Protection classification: IP5K2

(dust and high-pressure spray) per ISO 2065

Harnessing Expectations

2x jacketed unshielded twisted pairs for
100 Mbps transmission

Twisted pair cable types must comply with
SAE-J3117 standard and the Open Alliance
Specification for Communication Channel

2.0 = equivalent to 100BaseT1

Digital matched differential impedance:

100 Ohms

Sensor units are daisy chained together

ORDERING INFORMATION

Part No.	Description
2138390005	Molex Sensor Assembly
5601230401	1x4 DuraClik Connector, Key A, with ISL
34967-4051	1x4 Mini50 Sealed Connector, Key A, with Circuits 1 and 2 Plugged (End Node)
34905-6447	CTX50 Sealed Connector, Silver Plated, Large Grip
	Leoni Dacar 546 – 2x0.35/Cu/T125

www.molex.com/link/ancsensors.html