



## Air Quality & Ambient Temperature Sensor

### Overview

The Air Quality Sensor (AQS) monitors air entering a vehicle for exhaust gases, and sends a signal to open or close the damper of the HVAC system in order to maintain good air quality inside the vehicle. The integrated Ambient Temperature Sensor measures the temperature outside the passenger compartment and provides a signal input to the HVAC controller.

### Features

- Amphenol Reliable Dual Sensing Cell
- Detectable Gases: NO<sub>2</sub>, CO, NH<sub>3</sub>, CH<sub>4</sub>
- Separate Ambient Sensor available for OEM request
- Voltage Input: 12VDC for AQS, 5VDC for Ambient Sensor
- R @ 25°C: 30kΩ ±1.0% or 2.2K Ω ±3.0% or other
- Response Time: < 30 seconds (in oil bath)

Product Availability: 1st half of 2018



### Applications

- Automatic HVAC for Passenger Cars (Gas/EV/Hybrid)
- Front End Installation
- Ambient Temperature
- Compartment Air Purify Module

Specifications	Minimum	Typical	Maximum	Unit
Operation Voltage Range	9.0	12.0	16.0	VDC
Current		150	200	mA
Operating Temperature	-30°C		100°C	°C
Storage Temperature	-40°C		125°C	°C
Output Signal				
Warm Up	2.2	2.5	2.8	VDC
FRE Mode	4.0	4.3	4.6	VDC
REC Mode	0.6	0.9	1.2	VDC
Operating Humidity			95	%RH