

Amphenol Sensors

Connecting your world through
Sensing Innovations

Automotive Solutions

Amphenol Sensors is a leading innovator in sensor technologies and measurement solutions. Offering the most diverse sensor portfolio of standard and customized products for the world's most demanding regulatory and industry-driven applications, Amphenol creates value by providing critical information for real-time decisions.

Amphenol Sensors is your best source for automotive sensors, offering the technology that brings your systems together—to protect the vehicle, its occupants and the environment.

From engine management to safety systems, consider us your global partner for all of your automotive sensor needs. We deliver innovative solutions and high-performing products with the finest customer support—bringing the best results to you and your customers.



Amphenol Sensors

Automotive Sensor Solutions

● Temperature ● Pressure ● Gas ● Humidity ● Dust/Particulates ● Position ● Level ● Combination

Fuel Handling System

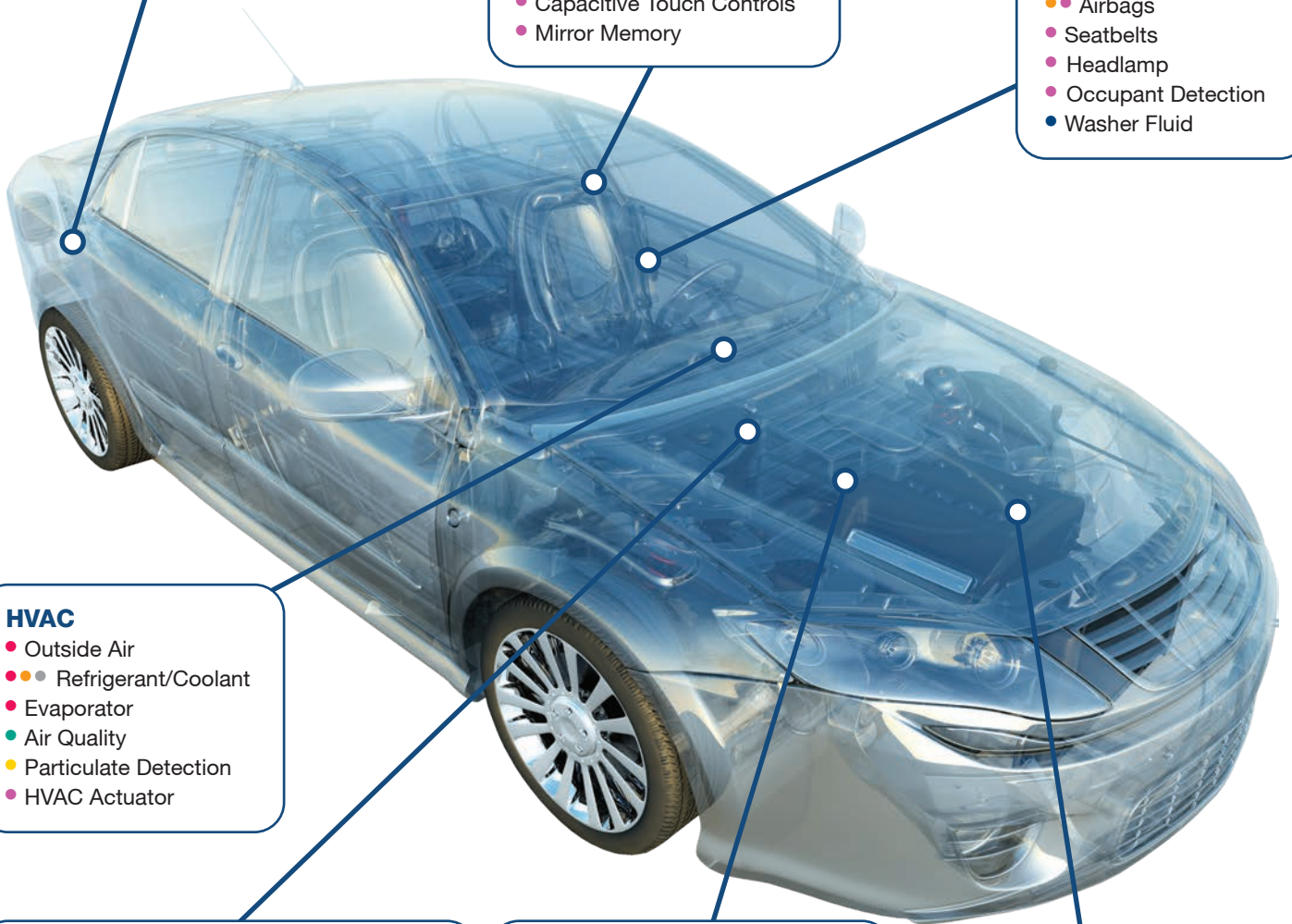
- Fuel
- Fuel Rail
- Fuel Vapor
- Fuel Tank
- Exhaust Gas
- EVAP

Cabin Comfort

- Discharge Air
- Steering Wheel
- Seats
- Fresh Air Ventilation
- Dewpoint
- Cabin Air Filter
- Particulate Detection
- Capacitive Touch Controls
- Mirror Memory

Safety Systems

- Steering Wheel
- Seats
- Defog
- Battery
- Leak Detection
- Driver Alertness
- Brakes
- Airbags
- Seatbelts
- Headlamp
- Occupant Detection
- Washer Fluid



HVAC

- Outside Air
- Refrigerant/Coolant
- Evaporator
- Air Quality
- Particulate Detection
- HVAC Actuator

Powertrain

- Transmission - Fluid, Oil
- Transmission - Gearbox, Park Lock, Speed
- Power Steering
- EURO-6 Urea

Engine Management

- Engine Air
- Engine Oil
- Coolant
- Intake Air
- Exhaust Gas Recirculation (EGR)
- Cylinder Head
- MAP/TMAP
- De-ionized Water Injection

After-Treatment

- Diesel Particulate Filter (DPF)

ENGINE MANAGEMENT

● Temperature Sensors

- High accuracy • High stability
- Noise immune NTC option
- Fast response time • Combination sensor options



● Pressure Sensors

- High accuracy • High performance
- Long-term stability • Custom options



● Level, Concentration & Conductivity Sensors

- Accuracy ±1%
- Detects proper fluid fill and contaminants



POWERTRAIN

● Temperature Sensors

- High accuracy • High stability
- Customized to application
- Utilizes metallurgical bond glass-coated NTC



● Pressure Sensors

- Stable and accurate • Durable
- Customizable design • Multiple output options



● Position Sensors

- Non-contact inductive and hall-effect technologies
- Accurate output at high speeds
- Reliable in harsh environments



● Combined Pressure & Temperature Sensors

- High accuracy • Oil resistant
- Wide temperature range: -40°C to 150°C
- Robust against pressure spikes



SAFETY SYSTEMS

● Temperature Sensors

- Fast response time • High accuracy
- High stability • Proven reliability
- Deep domain expertise • Duplicate manufacturing locations



● Pressure Sensors

- Fast response time • High accuracy
- Long-term stability • Custom options
- Diagnostic and protective features (ASIL)



● CO₂ Gas Sensors

- Self-calibration • Low power consumption
- Compact design • Lin Bus communication
- Custom packaging options



● Position Sensors

- Robust and reliable modular design
- Selectable working principle: Potentiometric, hall effect, reed switch



● Level & Concentration Sensors

- Accuracy ±2%
- Continuous monitoring for fluid contamination
- Programmable for irregular shape tanks



AFTER-TREATMENT

● Temperature Sensors

- High accuracy • High stability
- Integral/pigtail options
- Fast response time • Right angle and straight probe options



CABIN COMFORT

● Temperature Sensors

- High accuracy • High stability
- Noise immune NTC option
- Moisture resistant • Fast response time



● Pressure Sensors

- High performance • High accuracy
- Customizable design • Multiple output options



● Gas Detection Sensors

- Detectable gases: CO₂, VOC
- Compact design • Custom packaging options



● Dewpoint Sensors

- PWM and Lin Bus • Custom package options
- Combined temperature measurement



● Dust Particulate Sensors

- PM2.5 • Laser detection
- Fast response • High accuracy



● Position Sensors

- Low profile • Excellent resolution
- Custom form-factor ready
- Linear and rotary position feedback



HVAC

● Temperature Sensors

- High accuracy • High stability
- Noise immune NTC option
- Moisture resistant • Fast response time



● Position Sensors

- Long life • Low hysteresis
- Excellent resolution and linearity
- Field-proven • Custom connectors and wires



● Pressure Sensors

- Leakproof • High accuracy
- Media compatibility



● Gas Detection Sensors

- Compact design
- Custom packaging options
- Detectable gases: CO₂, Hydrocarbons, NOX, Ammonia



● Dust Particulate Sensors

- PM2.5 • Laser detection
- Fast response • High accuracy



● Combined Pressure & Temperature Sensors

- Leakproof • High accuracy
- Wide pressure range: 10bar to 200bar
- Diagnostic and protective features (ASIL)



FUEL HANDLING SYSTEM

● Temperature Sensors

- High accuracy • High stability
- Integral/pigtail options
- Combination sensor options



● Pressure Sensors

- High accuracy • High performance
- Long-term stability
- Custom options



Sensor Technologies

MAJOR MARKETS SERVED	Thermometrics, Inc.	Telaire	NovaSensor	Protimeter	Kaye	SGX Sensortech	Piher Sensing Systems	Wilcoxon Sensing Technologies	Piezo Technologies	i2s	All Sensors	SSI Technologies	Exa Thermometrics
	Temperature	Gas & Moisture	Pressure	Moisture Meters	Thermal Validation	Gas	Position	Vibration	Ultrasonic	Pressure & Temperature	Ultra Low Pressure	Level, Quality & Pressure	Temperature
Aerospace (Commercial)	●		●			●	●				●	●	●
Agriculture	●	●		●		●	●			●		●	●
Air Quality (Indoor)	●	●	●	●		●	●	●			●	●	●
Automation	●	●					●	●			●		●
AUTOMOTIVE	●	●	●			●	●			●		●	●
After-Treatment	●												●
Cabin Comfort	●	●	●			●	●						●
Engine Management	●		●							●		●	●
Fuel Handling System	●		●							●			●
HVAC	●	●				●	●			●			●
Powertrain	●		●				●			●			●
Safety Systems	●	●	●				●			●		●	●
Construction & Restoration				●								●	
Electrification (EV/HEV)	●	●	●			●	●			●		●	●
Energy	●					●		●	●				●
Environmental Monitoring					●	●					●		
Heavy Equipment & Off-Road (HVOR)	●		●			●	●			●		●	●
HVACR	●	●	●			●	●	●		●	●	●	●
Industrial	●	●	●	●		●	●	●		●	●	●	●
Marine	●					●	●	●				●	
Medical	●	●	●		●		●		●		●	●	
Military	●		●			●	●	●	●		●	●	
Non-Destructive Testing (NDT)									●				
Oil & Gas	●		●			●	●	●	●		●	●	●
Pharmaceutical & Biotech					●						●	●	
Process Control	●	●	●			●	●	●		●	●	●	●
Railway	●							●				●	●
Thermal Validation					●								