Amphenol Sensors

Connecting your world through
Sensing Innovations

Commercial Aerospace

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.

With its breadth of sensor capabilities and technologies, Amphenol Sensors provides solutions that make safe and efficient commercial air flights possible. From cabin comfort to aircraft ice protection, our sensors play an integral part in many aerospace applications, including avionics, engines, fuel systems, airframe and in-cabin environment. And, just as industry needs and trends are evolving, Amphenol Sensors is constantly evolving to integrate and enhance available sensor technologies for next-generation solutions.

Amphenol Sensors

Commercial Aerospace Sensor Solutions

● Temperature ● Pressure ● Gas ● Speed ● Position ● Fluid Level

Airframe and Avionics
- ● Temperature Sensors
- ● Pressure Sensors

In-Cabin and Galley
- ● Temperature Sensors
- ● Gas Detection Sensors
- ● Position Sensors

Fuel Systems
- ● Pressure Sensors
- ● Gas Detection Sensors
- ● Position Sensors
- ● Ultrasonic Fluid Level Sensors

Engine
- ● ● Speed & Position Sensors
- ● Ultrasonic Fluid Level Sensors

AIRFRAME AND AVIONICS

Temperature Sensors
Prevents ice formation on vanes during flight.
- Self-regulating properties - Power will adjust to prevailing conditions with ~10x variation in output
- Higher reliability than wire-wound products
- Special shapes to suit customer design

THERMOMETRICS
EXATHERMOMETRICS

Temperature Sensors
Precision temperature measurement of in-flight instrumentation and climate control.
- Excellent long-term stability
- High reliability
- Multiple rugged configurations available

THERMOMETRICS
EXATHERMOMETRICS

Pressure Sensors
Used in instrumentation for airspeed indication.
- Low long-term drift
- High stability and repeatability

NOVA SENSOR

Ultra Low Pressure Sensors
Used in instrumentation for barometric pressure/weather monitoring.
- Calibrated to –40°C to 125°C
- High stability and repeatability
- Digital output: 14bit or 18bit

ALL SENSORS®
an Amphenol company

ENGINE

Speed & Position Sensors
Monitors wheel speed, engine speed and position of the engine.
- Variable reluctance and active hall effect or magneto resistive sensors
- Zero speed, large air gap capability
- Packaged to resist harsh environments

SST

Ultrasonic Fluid Level Sensors
Continuously monitors liquid levels within tank or reservoir, including fuel, coolant and hydraulic fluids.
- ±1% accuracy
- Robust, non-contact sensing
- Slosh filtering

SST

FUEL SYSTEMS

Pressure Sensors
Measures fluid levels within the fuel system.
- Long-term stability
- High accuracy and repeatability

NOVA SENSOR

Gas Detection Sensors
Detects the presence of certain gases that indicate fuel leakage.
- 0 to 100% LEL
- Approved EX-d
- Mechanically robust

SGX SENSORTECH

Position Sensors
Provides liquid level feedback within the fuel system.
- Sealed for harsh environments
- Selectable working principle: Hall effect/reed switch
- Robust and reliable modular design

PIHER sensing systems

Ultrasonic Fluid Level Sensors
Continuously monitors SCR DEF levels and concentration for detection of water dilution.
- ±1% accuracy level and concentration

SST

IN-CABIN AND GALLEY

Temperature Sensors
Provides in-flight temperature control for cabin comfort and service items.
- High accuracy
- Long-term stability
- Rugged design for maximum protection and direct immersion in liquids or gases

THERMOMETRICS
EXATHERMOMETRICS

Gas Detection Sensors
Detects the presence of Hydrocarbon gases that indicate fuel leakage.
- 0 to 10,000 ppm
- Linearized digital output
- Mechanically robust

SGX SENSORTECH

Position Sensors
Detects when seatbelt is latched and provides alert to enforce mandatory usage during takeoff and landing.
- Sealed for harsh environments
- Selectable working principle: Hall effect/reed switch
- Robust and reliable modular design

PIHER sensing systems

Position Sensors
Detects position of overhead storage door and provides alert when door is not fully closed to prevent it from opening during flight.
- Miniature switch or position sensor
- Digital output
- Surface mount device (SMD) version

PIHER sensing systems

Sensor Technologies

MAJOR MARKETS SERVED	Thermometrics, Inc. — Temperature	Telaire — Gas & Moisture	NovaSensor — Pressure	Protimeter — Moisture Meters	Kaye — Thermal Validation	SGX Sensortech — Gas	Piher Sensing Systems — Position	Wilcoxon Sensing Technologies — Vibration	Piezo Technologies — Ultrasonic	i2s — Pressure & Temperature	All Sensors — Ultra Low Pressure	SSI Technologies — Ultrasonic Level & Quality	Exa Thermometrics — Temperature
Aerospace (Commercial)	●		●			●	●				●	●	●
Airframe & Avionics	●		●								●		●
Engine												●	
Fuel Systems			●			●	●					●	
In-Cabin & Galley	●					●	●						●
Agriculture	●	●		●		●	●				●	●	●
Air Quality (Indoor)	●	●	●	●		●		●			●	●	●
Automation	●	●					●	●			●		●
Automotive	●		●			●					●	●	●
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					●								

Amphenol
Sensors

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