

Amphenol Sensors

Connecting your world through
Sensor Innovations

Medical Applications

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.

Today's patient care demands the ultimate in accurate and reliable monitoring of critical parameters. Amphenol is a pioneer in the development of new and increasingly robust sensor technology for medical applications. We offer innovative solutions, fast development cycles and excellent quality control to meet the most stringent requirements.



Amphenol Sensors

Medical Sensor Solutions

● Temperature ● Pressure ● Gas ● Position ● Thermal Validation ● Ultrasonic

Patient Monitoring

- Thermometry
- Skin Temperature
- Intra-Uterine Pressure
- Blood Pressure
- Glucose Monitoring
- Wearables

Respiratory Care

- Ventilation
- Pulmonary
- Spirometry
- Sleep Apnea
- Anesthesia
- Inhalers
- Oxygen Concentration

Critical Care

- Catheters
- Ablation
- Fluid Management
- Defibrillation
- Ultrasonic Air-in-line Detection

Medical Instrumentation

- Clinical & Laboratory Equipment
- Insulin Pumps
- Kidney Dialysis
- Clinical Mattresses
- Laboratory Analysis
- Tissue Ablation
- Ultrasonic Bone Healing
- Temperature Validation Systems
- Calibration Equipment
- Environmental Monitoring
- Cold Chain Monitoring
- Oxygen Concentration

Surgical Assemblies

- Heat Ablation
- Liposuction
- Medical Lasers
- Catheters
- Ultrasonic Tissue Ablation
- Ultrasonic Recanalization



PATIENT MONITORING

● Temperature Sensors

- Highly accurate • Proven reliability
- Fast response time • Continuous monitoring
- Small profile for tight spaces • Customization options



● Pressure Sensors

- AAMI compliant • High reliability and quality
- Low cost, disposable • High performance
- Customizable designs



● Position Sensors

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



RESPIRATORY CARE

● Temperature Sensors

- Highly accurate • Proven reliability
- Fast response time • Continuous monitoring
- Small profile for tight spaces • Customization options



● Pressure Sensors

- High accuracy and stability
- Multiple output options: Analog, Digital I²C, SPI
- High over-pressure capability



● Ultra Low Pressure Sensors

- High accuracy and repeatability
- Fast response
- Customized options available
- Sized for portable or handheld equipment



● Position Sensors

- Low profile • Long life
- Excellent resolution
- Excellent linearity • Custom connectors and wires



● Gas Sensors

- Low power
- Fast response time: <1 second



CRITICAL CARE

● Temperature Sensors

- Highly accurate • Proven reliability
- Fast response time • Continuous monitoring
- Small profile for tight spaces • Customization options



● Pressure Sensors

- Extremely small size • Stable and accurate
- Media compatibility • Customizable designs
- Die, wire assembly and eval-kits available



● Ultra Low Pressure Sensors

- High accuracy and repeatability
- Fast response
- Customized options available
- Sized for portable or handheld equipment



● Position Sensors

- Low profile • Long life
- Excellent resolution
- Excellent linearity • Custom connectors and wires



● Ultrasonic Sensors

- Custom solutions
- Piezoceramic capability • High reliability
- Integration capability for occlusion and flow



● Position and Level Sensors

- Absolute, non-contact measurement
- Highest reliability
- Compact design



MEDICAL INSTRUMENTATION

● Temperature Sensors

- Highly accurate • Proven reliability
- Fast response time • Continuous monitoring
- Small profile for tight spaces • Customization options



● Pressure Sensors

- High accuracy, stability and reliability
- Media-isolated stainless steel
- Customizable designs
- Pressure ranges: 2" H₂O - 15,000 psi



● Ultra Low Pressure Sensors

- High accuracy and repeatability
- Fast response
- Customized options available
- Sized for portable or handheld equipment



● Position Sensors

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



● Ultrasonic Sensors

- High reliability • Low profile
- Full device capability



● Thermal Validation

- Wired • Wireless • RF-based real-time systems
- Data integrity meeting GXP requirements

● Environmental Monitoring

- Complete solution • Regulatory compliant
- Robust, scalable system architecture
- Monitor • Alarm • Secure • Report • Access • Visibility



● Position and Level Sensors

- Absolute, non-contact measurement
- Highest reliability
- Compact design



● Gas Sensors

- Low power
- Fast response time: <1 second



SURGICAL ASSEMBLIES

● Temperature Sensors

- Highly accurate • Proven reliability
- Fast response time • Continuous monitoring
- Small profile for tight spaces • Customization options



● Pressure Sensors

- Extremely small size • Stable and accurate
- Media compatibility • Customizable designs
- Die, wire assembly and eval-kits available



● Ultrasonic Sensors

- High power and low self-heating
- Combined imaging and therapy
- High accuracy • High reliability
- Tunable transducers



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, Speed, Current	Wilcoxon Sensing Technologies Vibration	Piezo Technologies Ultrasonic	i2s Pressure & Temperature	All Sensors Ultra Low Pressure	SSI Technologies Level, Concentration, Speed & Pressure	Exa Thermometrics Temperature	PCB Piezotronics Vibration, Pressure, Force & Acoustics	Endevco Vibration, Pressure & MEMS	Temposonics Position, Velocity, Level
Aerospace (Commercial)	●		●			●	●				●	●	●	●	●	●
Agriculture	●	●		●		●	●			●	●	●	●	●		●
Air Quality (Indoor)	●	●	●	●		●	●	●			●	●	●	●		
Automation	●	●					●	●			●		●	●		●
Automotive	●	●	●			●	●			●		●	●	●	●	●
Construction & Restoration				●								●		●		●
Vehicle Electrification	●	●	●			●	●			●		●	●	●	●	●
Energy	●					●	●	●			●		●	●		●
Environmental Monitoring					●	●					●					●
Heavy Vehicle & Off-Road (HVOR)	●		●			●	●			●		●	●	●	●	●
HVACR	●	●	●			●	●	●		●	●	●	●	●		
Industrial	●	●	●	●		●	●	●		●	●	●	●	●		●
Marine	●					●	●	●			●	●		●		●
MEDICAL	●	●	●		●	●	●		●		●	●				●
Critical Care	●		●				●		●		●					●
Medical Instrumentation	●		●		●		●		●		●	●				
Patient Monitoring	●		●				●				●					
Respiratory Care	●		●				●				●					
Surgical Assemblies	●		●						●							
Military	●		●			●	●	●			●	●		●	●	●
Non-Destructive Testing (NDT)								●								
Oil & Gas	●		●			●	●	●	●		●	●	●	●		●
Pharmaceutical & Biotech					●	●					●	●		●		●
Process Control	●	●	●			●	●	●		●	●	●	●	●		●
Railway	●					●		●			●	●	●	●	●	●
Thermal Validation					●											