NA Acoustic Sensors - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2025 - 2030)

Market Report | 2025-04-28 | 110 pages | Mordor Intelligence

AVAILABLE LICENSES:

- Single User License $4750.00
- Team License (1-7 Users) $5250.00
- Site License $6500.00
- Corporate License $8750.00

Report description:

The NA Acoustic Sensors Market is expected to register a CAGR of 14.15% during the forecast period.

Key Highlights
- Due to its use in television transmitters and radios to create signals for transmission, the surface wave acoustic sensor is predicted to rise rapidly throughout the forecast period. SAW devices are needed as filters in radio frequency applications and are critical components in satellite communication terminals and base stations.
- Furthermore, acoustic sensors have lately seen a surge in demand in automotive applications. The complete quiet of electric automobile motors may be a danger to unwary pedestrians. As a result, all new electric and hybrid cars will require auditory warning systems. As a result, increased worries about traffic management will propel the market forward.
- By merging silicon-based microelectronics with micromachining technology, MEMS has been designated as one of the most promising technologies of the twenty-first century, having the potential to change both industrial and consumer products. Because of their great sensitivity and ability to work wirelessly, new acoustic-wave-based MEMS devices provide a potential technology platform for a wide range of applications.
- The examined market experienced supply chain disruption during the first phase of the COVID-19 due to statewide lockdown and shutdown of several production facilities. However, from the second quarter of 2020, the market began to experience a resurgence in demand and output, mirroring the semiconductor industry trend.

North America Acoustic Sensors Market Trends

Telecommunications is Expected to Drive Market Growth

- The telecommunications industry is the largest consumer of acoustic sensors, primarily driven by smartphones and base stations. With telecom companies setting up more and more towers to support the ever-increasing customer base, base stations are increasing. Moreover, most of the telephone devices and other similar gadgets already have microphones/speakers installed, which support acoustic-sensing applications with a relatively low deployment cost.
- High bandwidth is required for real-time video streaming. A hybrid approach that blends acoustic and optical communications can assist overcome this barrier by providing high-quality real-time video streaming. Acoustic keeps the network topology and transmission control on a "thin" channel. When the optical channel fails, the acoustic channel is utilized to provide still frames of video.
- Owing to the increasing usage of smartphones, tablets, and other electronic devices in developed and developing economies such as the United States Canada, acoustic sensors are expected to witness growth during the forecast period.

Growing Need For Surface Acoustic Wave In The Consumer Electronics

- Due to increased smartphone sales and increased use of developing RF technologies in consumer electronics, sales of acoustic sensors and other associated equipment have seen a large increase in the region, broadening the breadth of the market analyzed.
- The increasing manufacturing of LTE, 4G, particularly 5G smartphones, presents significant growth potential for Surface Acoustic Wave (SAW). As they separate radio signals from the many spectrum bands utilized by various cellphones to receive and send information, RF filters are becoming typical components in these devices. In the sub-2.7 GHz frequency region, new enhanced SAW filters provide a higher performance solution than competitive BAW filters, resulting in more development prospects as 5G technology emerges.
- The majority of well-known smartphone manufacturers, including Apple, Samsung, and LG, use RF filters in their latest 5G devices. SAW sensor advancements also provide for more power-efficient RF routes in 4G and 5G multimode mobile devices at a cheaper cost than competing commercial alternatives with comparable performance metrics for original equipment makers (OEMs). Many academics are also looking at the possibilities of using the SAW MEMS microphone as a wireless passive accelerometer and pressure sensor.

North America Acoustic Sensors Industry Overview

Acoustic sensors are a relatively simple device to manufacture. Consequently, the market is fragmented with many global as well as local manufacturers, contributing to the market dynamics including Honeywell, Siemens AG, Panasonic, Murata, KYOCERA Corporation, etc. Under such conditions, the companies are focusing on expanding their business through strategic acquisitions, partnerships, and innovations. Some of the recent developments are:-

- June 2021 - Within US airspace, American Robotics is pushing the state-of-the-art for Beyond-Visual-Line-Of-Sight (BVLOS) drone operations. Scientific Applications & Research Associates and the corporation recently formed a cooperation (SARA). SARA's Terrestrial Acoustic Sensor Array (TASA), an acoustics-based aircraft identification system, is used by American Robotics' Scout System to successfully identify other aircraft and keep a safe distance from them while in flight.
- February 2021 - The BMP384 is a durable pressure sensor from Bosch Sensortec that delivers precision in a small design. The BMP384's strong performance and low power consumption make it suited for tough settings in industrial, consumer electronics, and household appliances.

Additional Benefits:

- The market estimate (ME) sheet in Excel format
- 3 months of analyst support

Table of Contents:

1 INTRODUCTION
1.1 Study Assumptions and Market Definition
1.2 Scope of the Study

2 RESEARCH METHODOLOGY

3 EXECUTIVE SUMMARY

4 MARKET INSIGHTS
4.1 Market Overview
4.2 Value Chain / Supply Chain Analysis
4.3 Industry Attractiveness - Porter's Five Forces Analysis
4.3.1 Threat of New Entrants
4.3.2 Bargaining Power of Buyers
4.3.3 Bargaining Power of Suppliers
4.3.4 Threat of Substitute Products
4.3.5 Intensity of Competitive Rivalry
4.4 Assessment of COVID-19 Impact on the Industry

5 MARKET DYNAMICS
5.1 Market Drivers
5.1.1 Rapid Growing Numbe of End-users
5.1.2 Low Manufacturing Costs
5.2 Market Restraints
5.2.1 Technical Difficulties

6 MARKET SEGMENTATION
6.1 By Type
6.1.1 Wired
6.1.2 Wireless
6.2 By Wave Type
6.2.1 Surface Wave
6.2.2 Bulk Wave
6.3 By Sensing Parameter
6.3.1 Temperature
6.3.2 Pressure
6.3.3 Torque
6.4 By Application
6.4.1 Aerospace and Defense
6.4.2 Automotive

6.4.3 Consumer Electronics
6.4.4 Healthcare
6.4.5 IT and Telecom
6.4.6 Others
6.5 By Country
6.5.1 United States
6.5.2 Canada

7 COMPETITIVE LANDSCAPE
7.1 Company Profiles
7.1.1 Siemens AG
7.1.2 Honeywell
7.1.3 Murata Manufacturing Co., Ltd.
7.1.4 Vectron International, Inc. (Microchip technology Incorporated)
7.1.5 ifm efector, inc.
7.1.6 Dytran Instruments, Inc.
7.1.7 Campbell Scientific, Inc.
7.1.8 Panasonic Corporation
7.1.9 KYOCERA Corporation

8 INVESTMENT ANALYSIS

9 FUTURE OF THE MARKET

NA Acoustic Sensors - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2025 - 2030)

Market Report | 2025-04-28 | 110 pages | Mordor Intelligence

To place an Order with Scotts International:

- - Print this form
- - Complete the relevant blank fields and sign
- - Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User License	$4750.00
	Team License (1-7 Users)	$5250.00
	Site License	$6500.00
	Corporate License	$8750.00
	VAT	
	Total	

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*		Phone*	
First Name*		Last Name*	
Job title*			
Company Name*		EU Vat / Tax ID / NIP number*	
Address*		City*	
Zip Code*		Country*	
		Date	2025-06-25
		Signature