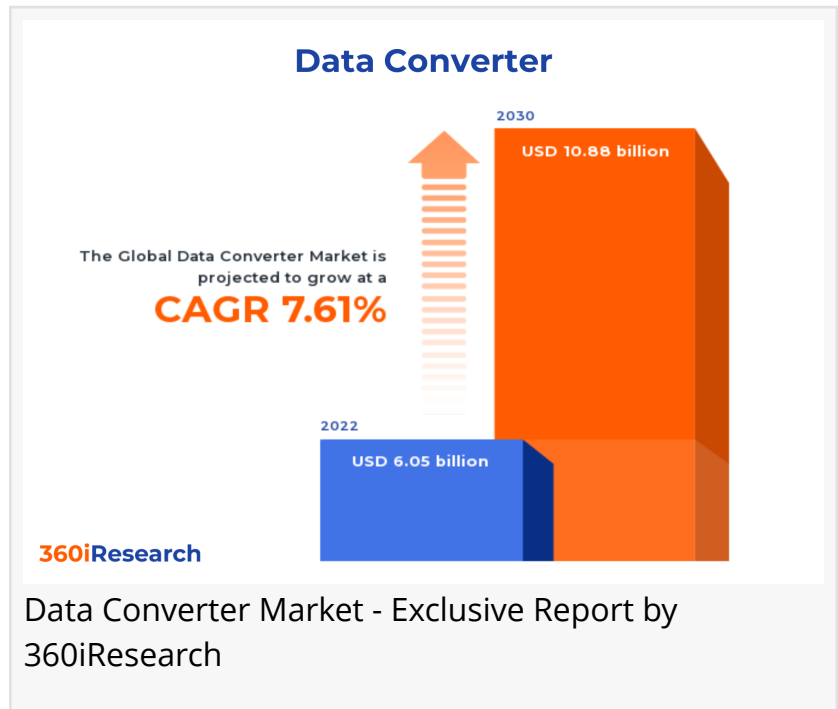


Data Converter Market worth \$10.88 billion by 2030, growing at a CAGR of 7.61% - Exclusive Report by 360iResearch

The Global Data Converter Market to grow from USD 6.05 billion in 2022 to USD 10.88 billion by 2030, at a CAGR of 7.61%.

PUNE, MAHARASHTRA, INDIA ,
November 15, 2023 /
EINPresswire.com/ -- The "[Data Converter Market](#) by Type (Analog-To-Digital Converters, Digital-To-Analog Converters), Sampling Rate (General-Purpose Data Converters, High-Speed Data Converters), Resolution, Industry - Global Forecast 2023-2030" report has been added to 360iResearch.com's offering.



The Global Data Converter Market to grow from USD 6.05 billion in 2022 to USD 10.88 billion by 2030, at a CAGR of 7.61%.

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A data converter and electronic circuit play a crucial role in transforming data from one format to another, analog to digital, and vice versa. Data converters play a substantial role in an ever-increasing digital world. More intricate data converters are needed to translate digital data to and from the essentially analog environment as more products execute calculations in the digital or discrete time domain. The rising growth of wireless communication networks, increasing usage of high-resolution images, and proliferating development of digital technology have expanded the market scope in recent years. However, associated risk factors of the data conversion process and the limited availability of skilled and experienced workforce may hamper the market development. Nevertheless, the surging establishment of 5G infrastructure and the introduction of low-power consumption data converters create enormous prospects for market

development in the coming years.

Sampling Rate: Rising usage of high-speed data converters for specialized, high-performance use cases that require precision

General-purpose data converters are devices that are commonly used to perform analog-to-digital conversion (ADC) and digital-to-analog conversion (DAC) tasks. These devices are moderately accurate and operate at standard sampling rates to convert analog waveforms into digital signals and vice versa. High-speed data converters, on the other hand, are specialized devices that can perform analog-to-digital and digital-to-analog conversion at high sampling rates, typically greater than 1 GHz. These devices are designed to enable high-speed, high-bandwidth applications such as wireless communications, instrumentation, and aerospace/defense electronics.

Type: Growing preference for analog-to-digital converters across telecommunication and automotive industries

Analog-to-digital converters (ADCs) translate analog signals into digital data for processing by electronic systems. As the world transitions to digital technology, the usage of high-performance ADCs is increasing across industries, including telecommunications, healthcare, and automotive. For telecommunications, high-resolution ADCs with sample rates over one gigasample per second are needed for next-generation 5G wireless infrastructure and high-speed data acquisition systems. Digital-to-analog converters (DACs) convert digital signals into analog signals. The preference for DACs depends on the required analog signal output, voltage, current, resolution, and accuracy.

Resolution: Increasing usage of data converters with 20 bits for highly precise applications

The highest resolution data converters with 20 bits and above are optimal for highly precise applications where even minor signal variances need to be captured. These include medical devices, aerospace systems, and high-end audio equipment. Lower-resolution data converters with below 10 bits are sufficient for basic applications that do not require high precision, such as some industrial uses, household electronics, and certain telecommunications equipment. Data converters up to 20 bits provide a mid-range resolution that balances performance and cost-effectiveness for applications such as automotive systems, instrumentation, and some consumer electronics.

Industry: High potential of data conversion in the automotive industry to improve safety features and reduce environmental impact

In the automotive industry, self-driving, and connected vehicle technologies are advancing rapidly. Vehicles are being outfitted with sensors and systems that generate huge amounts of data about vehicle performance, component diagnostics, driver behavior, traffic patterns, and the surrounding environment. Data conversion in the automotive industry helps in improving safety features, enhancing operational efficiency, reducing environmental impact, and delivering an improved customer experience. Telecommunication companies also depend on data conversion for network planning, optimization, and customer service. As people adopt more

devices and higher bandwidth services, telecoms capture massive amounts of data about network usage, service quality, device performance, and customer activity. Data conversion allows telecoms to move from a reactive to a predictive business model. Consumer electronics depend on data conversion for powering smart home systems, personal health monitoring, and entertainment devices. Data conversion solutions need to handle a wide range of data types, from audio and video to environmental sensors and biometric data. The industrial sector requires robust data conversion solutions for powering heavy machinery, advanced robotics, industrial IoT, and smart factories. Key needs include handling extremely high data volume and velocity with a low tolerance for latency. Data conversion is pivotal for enabling advanced healthcare systems, medical devices, diagnostic equipment, and electronic health records. High accuracy, security, and the ability to handle sensitive health data are critical needs.

Regional Insights:

The American data converter market is well developed owing to the significant growth of communication channels and the strong presence of market players. The proliferating development of 5G infrastructure, rapid adoption of IIoT, and connected devices on an industrial scale have expanded the data converters market scope in the region. Moreover, European countries are strengthening their digital economy through rising technologies, which have raised the demand for data converters in the EMEA region. Moreover, the surging adoption of 5G technology in the United Arab Emirates (UAE) and African countries have raised the demand for wireless devices, augmenting the deployment of data converters. The Asia-Pacific region is also witnessing significant growth prospects in the forecast period due to favorable regulatory policies for semiconductor production. The escalating adoption of advanced digital technologies and devices has widened the scope for data converters in Asian countries.

FPNV Positioning Matrix:

The FPNV Positioning Matrix is essential for assessing the Data Converter Market. It provides a comprehensive evaluation of vendors by examining key metrics within Business Strategy and Product Satisfaction, allowing users to make informed decisions based on their specific needs. This advanced analysis then organizes these vendors into four distinct quadrants, which represent varying levels of success: Forefront (F), Pathfinder (P), Niche (N), or Vital(V).

Market Share Analysis:

The Market Share Analysis offers an insightful look at the current state of vendors in the Data Converter Market. By comparing vendor contributions to overall revenue, customer base, and other key metrics, we can give companies a greater understanding of their performance and what they are up against when competing for market share. The analysis also sheds light on just how competitive any given sector is about accumulation, fragmentation dominance, and amalgamation traits over the base year period studied.

Key Company Profiles:

The report delves into recent significant developments in the Data Converter Market, highlighting leading vendors and their innovative profiles. These include ADSANTEC, Advanced Linear Devices, Inc., Agile Analog Ltd., ams-OSRAM AG, Analog Devices, Inc., Antelope Audio, Asahi Kasei Microdevices Corporation, Avia Semiconductor (Xiamen) Ltd., Cirrus Logic, Inc., Data Device Corporation, DATEL, Inc., Faraday Technology Corporation, Infineon Technologies AG, Intel Corporation, IQ-Analog, iSine, Inc., Lansdale Semiconductor, Inc., MaxLinear Inc., Microchip Technology Inc., Mouser Electronics, Inc., NXP Semiconductors N.V., Qorvo, Inc, Renesas Electronics Corporation, ROHM CO., LTD., Semiconductor Components Industries, LLC, Skyworks Solutions, Inc., STMicroelectronics International N.V., Synopsys, Inc., Teledyne Technologies Inc., and Texas Instruments Incorporated.

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Market Segmentation & Coverage:

This research report categorizes the Data Converter Market in order to forecast the revenues and analyze trends in each of following sub-markets:

Based on Type, market is studied across Analog-To-Digital Converters and Digital-To-Analog Converters. The Analog-To-Digital Converters commanded largest market share of 62.61% in 2022, followed by Digital-To-Analog Converters.

Based on Sampling Rate, market is studied across General-Purpose Data Converters and High-Speed Data Converters. The General-Purpose Data Converters commanded largest market share of 56.77% in 2022, followed by High-Speed Data Converters.

Based on Resolution, market is studied across 20 Bit above, Below 10 Bit, and Up to 20 Bit. The Up to 20 Bit commanded largest market share of 37.54% in 2022, followed by 20 Bit above.

Based on Industry, market is studied across Automotive, Communications, Consumer Electronics, Industrial, and Medical. The Communications commanded largest market share of 28.23% in 2022, followed by Medical.

Based on Region, market is studied across Americas, Asia-Pacific, and Europe, Middle East & Africa. The Americas is further studied across Argentina, Brazil, Canada, Mexico, and United States. The United States is further studied across California, Florida, Illinois, New York, Ohio, Pennsylvania, and Texas. The Asia-Pacific is further studied across Australia, China, India, Indonesia, Japan, Malaysia, Philippines, Singapore, South Korea, Taiwan, Thailand, and Vietnam. The Europe, Middle East & Africa is further studied across Denmark, Egypt, Finland, France, Germany, Israel, Italy, Netherlands, Nigeria, Norway, Poland, Qatar, Russia, Saudi Arabia, South Africa, Spain, Sweden, Switzerland, Turkey, United Arab Emirates, and United Kingdom. The

Americas commanded largest market share of 36.49% in 2022, followed by Europe, Middle East & Africa.

Key Topics Covered:

1. Preface
2. Research Methodology
3. Executive Summary
4. Market Overview
5. Market Insights
6. Data Converter Market, by Type
7. Data Converter Market, by Sampling Rate
8. Data Converter Market, by Resolution
9. Data Converter Market, by Industry
10. Americas Data Converter Market
11. Asia-Pacific Data Converter Market
12. Europe, Middle East & Africa Data Converter Market
13. Competitive Landscape
14. Competitive Portfolio
15. Appendix

The report provides insights on the following pointers:

1. Market Penetration: Provides comprehensive information on the market offered by the key players
2. Market Development: Provides in-depth information about lucrative emerging markets and analyzes penetration across mature segments of the markets
3. Market Diversification: Provides detailed information about new product launches, untapped geographies, recent developments, and investments
4. Competitive Assessment & Intelligence: Provides an exhaustive assessment of market shares, strategies, products, certification, regulatory approvals, patent landscape, and manufacturing capabilities of the leading players
5. Product Development & Innovation: Provides intelligent insights on future technologies, R&D activities, and breakthrough product developments

The report answers questions such as:

1. What is the market size and forecast of the Data Converter Market?
2. Which are the products/segments/applications/areas to invest in over the forecast period in the Data Converter Market?
3. What is the competitive strategic window for opportunities in the Data Converter Market?
4. What are the technology trends and regulatory frameworks in the Data Converter Market?
5. What is the market share of the leading vendors in the Data Converter Market?
6. What modes and strategic moves are considered suitable for entering the Data Converter Market?

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