

Asia Pacific Atomic Clock Market Forecast to 2027 - COVID-19 Impact and Regional Analysis by Type (Rubidium Atomic Clock and CSAC, Cesium Atomic Clock, and Hydrogen Maser Atomic Clock), and Application (Space and Military/Aerospace, Scientific and Metrology Research, Telecom and Broadcasting, and Other Applications)

Market Report | 2023-01-20 | 100 pages | The Insight Partners

AVAILABLE LICENSES:

- Single User Price \$3000.00
- Site Price \$4000.00
- Enterprise Price \$5000.00

Report description:

The Asia Pacific atomic clock market is expected to grow from US\$ 125.14 million in 2022 to US\$ 191.66 million by 2028. It is estimated to grow at a CAGR of 7.4% from 2022 to 2028.

Emerging Digital Infrastructure and 5G Base Stations is Expected to Provide Lucrative Opportunities for the Asia Pacific Atomic Clock Market

Network timing is a critical component of wireless network services. Growing advancements in wireless technologies with technology iterations from 2G to 5G have transformed the network timing architectures. 4G base stations can rely on the usual clocks for their split-second time coordination requirements. However, the emergence of 5G has changed the network timing architectures. In October 2022, the Government of India launched the 5G telecom spectrum service in 13 cities, which is anticipated to spread across the rest of the country by 2023. 5G will propel the use of atomic clocks and antennas to follow a phone or sensor with its own beam of data and can distribute networks for different tasks. Regular clocks are not standardized enough to deal with high-speed data movement. As a result, 5G network builders across the world are demanding atomic clocks for precision and accuracy. For instance, in November 2019, Vodafone announced to install an iridium atomic clock in its base stations to provide the correct time to its network if the GPS network goes down. Therefore, the growth in digital infrastructures, especially, 5G base station establishments are anticipated to boost the atomic clocks demand for reliable timing for higher data

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

rates and low latency. All these factors are expected to provide lucrative opportunities for the Asia Pacific atomic clock market .

Asia Pacific Atomic Clock Market Overview

The increasing production of atomic clock is one of the major factors driving the growth of market in Asia Pacific region. In Asia Pacific, China and Japan are the major producers of cesium and hydrogen maser atomic clocks. In addition, the Indian Space Research Organization (ISRO) has developed its own atomic clock ensemble of cesium and hydrogen maser. ISRO has also been working on high-precision atomic clocks based on rubidium. Further, China is one of the most significant revenue contributors to the Asia Pacific atomic clock market in Asia Pacific. China led the Asia Pacific market with a market share of 37.28% in 2021. It declared the BeiDou Navigation Satellite System (BDS) official commissioning in July 2020, marking it formally available for global users. More than 400 agencies and 300,000 research personnel and technicians are involved in the BDS system. The China Academy of Space Technology (CAST), a satellite developer, has brought together leading experts and manufacturers the country and has integrated the most advanced technologies and high-quality materials and products for the project. Rubidium atomic clocks provide BDS satellites with time and frequency standards, and these clocks play vital role in the system's positioning, speed measurement, and timing accuracy. More than 100 rubidium atomic clocks, including 70 high-precision clocks, have been delivered to the BDS program by the Xi'an branch in the last two decades. Further, Asia Pacific is anticipated to register the highest CAGR in the global atomic clock market. The rise in the use of atomic clocks in satellite antennas in the aviation, telecommunications, and broadcasting applications in countries such as India and China are anticipated to boost the region's market growth during the forecast period. In November 2022, the final module of China's Tiangong space station docked with its core structure completing landmark moment in the country's space ambitions. The module carried scientific equipment used to study microgravity and carry out experiments in fluid physics, materials science, combustion science and fundamental physics, along with the world's first space-based cold atomic clock system that will form the most precise time and frequency system in space, not losing one second in hundreds of millions of years. Such developments are anticipated to propel the growth of the Asia Pacific atomic clock market.

Asia Pacific Atomic Clock Market Revenue and Forecast to 2028 (US\$ Million)

Asia Pacific Atomic Clock Market Segmentation

The Asia Pacific atomic clock market is segmented into type, application, and country.

Based on type, the Asia Pacific atomic clock market is segmented into rubidium atomic clock and CSAC, cesium atomic clock, and hydrogen maser atomic clock. In 2022, the rubidium atomic clock and CSAC segment registered a largest share in the Asia Pacific atomic clock market.

Based on application, the Asia Pacific atomic clock market is segmented into space and military/aerospace, scientific and metrology research, telecom and broadcasting, and other applications. In 2022, space and military/aerospace segment registered a largest share in the Asia Pacific atomic clock market.

Based on country, the Asia Pacific atomic clock market is segmented into Australia, China, India, Japan, South Korea, and the Rest of Asia Pacific. In 2022, China segment registered a largest share in the Asia Pacific atomic clock market.

AccuBeat Ltd; Excelitas Technologies Corp; IQD Frequency Products Ltd; Leonardo SpA; Microchip Technology Inc; Orolia; Oscilloquartz SA; Stanford Research Systems Inc; and Tekron International Ltd are the leading companies operating in the Asia Pacific atomic clock market.

Table of Contents:

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

TABLE OF CONTENTS

1. Introduction
 - 1.1 Study Scope
 - 1.2 The Insight Partners Research Report Guidance
 - 1.3 Market Segmentation
 - 1.3.1 APAC Atomic Clock Market - By Type
 - 1.3.2 APAC Atomic Clock Market - By Application
 - 1.3.3 APAC Atomic Clock Market- By Country
2. Key Takeaways
3. Research Methodology
 - 3.1 Coverage
 - 3.2 Secondary Research
 - 3.3 Primary Research
4. APAC Atomic Clock Market Landscape
 - 4.1 Market Overview
 - 4.2 APAC PEST Analysis
 - 4.3 Ecosystem Analysis
 - 4.4 Expert Opinion
5. APAC Atomic Clock -Market Dynamics
 - 5.1 Market Drivers
 - 5.1.1 Increasing Need for a High Precision Atomic Clock in Aerospace and Military
 - 5.1.2 High Demand from Metrology Station Owing to a Time-Sensitive Applications
 - 5.2 Market Restraints
 - 5.2.1 High Cost and Complexities Associated with Atomic Clocks
 - 5.3 Market Opportunities
 - 5.3.1 Next-Generation Chip-Scale Atomic Clocks (CSACs)
 - 5.3.2 Emerging Digital Infrastructure and 5G Base Stations
 - 5.4 Future Trends
 - 5.4.1 Atomic Clocks based on Optical Lattices of Strontium, Ytterbium and Gadolinium Atoms
 - 5.5 Impact Analysis of Drivers and Restraints
6. Atomic Clock Market - APAC Analysis
 - 6.1 APAC Atomic Clock Market Overview
 - 6.2 APAC Atomic Clock Market - Revenue and Forecast to 2028 (US\$ Million)
7. APAC Atomic Clock Market Analysis - By Type
 - 7.1 Overview
 - 7.2 APAC Atomic Clock Market, By Type (2021 and 2028)
 - 7.3 Rubidium Atomic Clock and CSAC
 - 7.3.1 Overview
 - 7.3.2 Rubidium Atomic Clock and CSAC: APAC Atomic Clock Market - Revenue and Forecast to 2028 (US\$ Million)
 - 7.4 Cesium Atomic Clock
 - 7.4.1 Overview
 - 7.4.2 Cesium Atomic Clock: APAC Atomic Clock Market- Revenue and Forecast to 2028 (US\$ Million)
 - 7.5 Hydrogen Maser Atomic Clock
 - 7.5.1 Overview
 - 7.5.2 Hydrogen Maser Atomic Clock: APAC Atomic Clock Market- Revenue and Forecast to 2028 (US\$ Million)
8. APAC Atomic Clock Market Analysis - By Application

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 8.1 Overview
- 8.2 APAC Atomic Clock Market, By Application (2021 and 2028)
- 8.3 Space and Military/Aerospace
 - 8.3.1 Overview
 - 8.3.2 Space and Military/Aerospace Research: APAC Atomic Clock Market- Revenue and Forecast to 2028 (US\$ Million)
- 8.4 Scientific and Metrology Research
 - 8.4.1 Overview
 - 8.4.2 Scientific and Metrology Research: APAC Atomic Clock Market - Revenue and Forecast to 2028 (US\$ Million)
- 8.5 Telecom and Broadcasting
 - 8.5.1 Overview
 - 8.5.2 Telecom and Broadcasting: APAC Atomic Clock Market - Revenue and Forecast to 2028 (US\$ Million)
- 8.6 Other Applications
 - 8.6.1 Overview
 - 8.6.2 Other Applications: APAC Atomic Clock Market - Revenue and Forecast to 2028 (US\$ Million)
- 9. APAC Atomic Clock Market - Country Analysis
 - 9.1 Overview
 - 9.1.2 APAC: Atomic Clock Market, by Key Country
 - 9.1.2.1 Australia: Atomic Clock Market - Revenue and Forecast to 2028 (US\$ Million)
 - 9.1.2.1.1 Australia: Atomic Clock Market, by Type
 - 9.1.2.1.1.2 Australia: Atomic Clock Market, by Application
 - 9.1.2.1.2 Australia: Atomic Clock Market, by Application
 - 9.1.2.2 China: Atomic Clock Market - Revenue and Forecast to 2028 (US\$ Million)
 - 9.1.2.2.1 China: Atomic Clock Market, by Type
 - 9.1.2.2.1.2 China: Atomic Clock Market, by Application
 - 9.1.2.2.2 China: Atomic Clock Market, by Application
 - 9.1.2.3 India: Atomic Clock Market - Revenue and Forecast to 2028 (US\$ Million)
 - 9.1.2.3.1 India: Atomic Clock Market, by Type
 - 9.1.2.3.1.2 India: Atomic Clock Market, by Application
 - 9.1.2.3.2 India: Atomic Clock Market, by Application
 - 9.1.2.4 Japan: Atomic Clock Market - Revenue and Forecast to 2028 (US\$ Million)
 - 9.1.2.4.1 Japan: Atomic Clock Market, by Type
 - 9.1.2.4.1.2 Japan: Atomic Clock Market, by Application
 - 9.1.2.4.2 Japan: Atomic Clock Market, by Application
 - 9.1.2.5 South Korea: Atomic Clock Market - Revenue and Forecast to 2028 (US\$ Million)
 - 9.1.2.5.1 South Korea: Atomic Clock Market, by Type
 - 9.1.2.5.1.2 South Korea: Atomic Clock Market, by Application
 - 9.1.2.5.2 South Korea: Atomic Clock Market, by Application
 - 9.1.2.6 Rest of APAC: Atomic Clock Market - Revenue and Forecast to 2028 (US\$ Million)
 - 9.1.2.6.1 Rest of APAC: Atomic Clock Market, by Type
 - 9.1.2.6.1.2 Rest of APAC: Atomic Clock Market, by Application
 - 9.1.2.6.2 Rest of APAC: Atomic Clock Market, by Application
- 10. Industry Landscape
 - 10.1 Overview
 - 10.2 Market Initiative
 - 10.3 New Product Development
 - 10.4 Merger and Acquisition
- 11. Company Profiles
 - 11.1 AccuBeat Ltd
 - 11.1.1 Key Facts
 - 11.1.2 Business Description
 - 11.1.3 Products and Services
 - 11.1.4 Financial Overview
 - 11.1.5 SWOT Analysis

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 11.1.6 Key Developments
- 11.2 Excelitas Technologies Corp
 - 11.2.1 Key Facts
 - 11.2.2 Business Description
 - 11.2.3 Products and Services
 - 11.2.4 Financial Overview
 - 11.2.5 SWOT Analysis
 - 11.2.6 Key Developments
- 11.3 IQD Frequency Products Ltd
 - 11.3.1 Key Facts
 - 11.3.2 Business Description
 - 11.3.3 Products and Services
 - 11.3.4 Financial Overview
 - 11.3.5 SWOT Analysis
 - 11.3.6 Key Developments
- 11.4 Leonardo SpA
 - 11.4.1 Key Facts
 - 11.4.2 Business Description
 - 11.4.3 Products and Services
 - 11.4.4 Financial Overview
 - 11.4.5 SWOT Analysis
 - 11.4.6 Key Developments
- 11.5 Microchip Technology Inc
 - 11.5.1 Key Facts
 - 11.5.2 Business Description
 - 11.5.3 Products and Services
 - 11.5.4 Financial Overview
 - 11.5.5 SWOT Analysis
 - 11.5.6 Key Developments
- 11.6 Orolia
 - 11.6.1 Key Facts
 - 11.6.2 Business Description
 - 11.6.3 Products and Services
 - 11.6.4 Financial Overview
 - 11.6.5 SWOT Analysis
 - 11.6.6 Key Developments
- 11.7 Oscilloquartz SA
 - 11.7.1 Key Facts
 - 11.7.2 Business Description
 - 11.7.3 Products and Services
 - 11.7.4 Financial Overview
 - 11.7.5 SWOT Analysis
 - 11.7.6 Key Developments
- 11.8 Stanford Research Systems Inc
 - 11.8.1 Key Facts
 - 11.8.2 Business Description
 - 11.8.3 Products and Services

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 11.8.4 Financial Overview
- 11.8.5 SWOT Analysis
- 11.8.6 Key Developments
- 11.9 Tekron International Ltd
- 11.9.1 Key Facts
- 11.9.2 Business Description
- 11.9.3 Products and Services
- 11.9.4 Financial Overview
- 11.9.5 SWOT Analysis
- 11.9.6 Key Developments
- 12. Appendix
- 12.1 About The Insight Partners
- 12.2 Word Index

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Asia Pacific Atomic Clock Market Forecast to 2027 - COVID-19 Impact and Regional Analysis by Type (Rubidium Atomic Clock and CSAC, Cesium Atomic Clock, and Hydrogen Maser Atomic Clock), and Application (Space and Military/Aerospace, Scientific and Metrology Research, Telecom and Broadcasting, and Other Applications)

Market Report | 2023-01-20 | 100 pages | The Insight Partners

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 Price	\$3000.00
	Site Price	\$4000.00
	Enterprise Price	\$5000.00
		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*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		
Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Address*

City*

Zip Code*

Country*

Date

2026-03-10

Signature

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com