

Micro Computed Tomography Market Forecasts to 2034 – Global Analysis By Product (In-Vivo and In-Vitro), Component, Application, End User and By Geography

<https://marketpublishers.com/r/M92D2C25F3C4EN.html>

Date: May 2026

Pages: 200

Price: US\$ 4,150.00 (Single User License)

ID: M92D2C25F3C4EN

Abstracts

According to Statistics MRC, the Global Micro Computed Tomography Market is accounted for \$317.02 million in 2026 and is expected to reach \$730.57 million by 2034 growing at a CAGR of 11.0% during the forecast period. Micro Computed Tomography (micro-CT) is a powerful 3D imaging technique that uses X-rays to generate detailed cross-sectional images of small objects. Micro-CT provides valuable insights into the internal structures of samples, aiding in research, quality control, and diagnostics. Its versatility makes it indispensable for studying materials, biological samples, and artifacts, contributing to advancements in science, medicine, and various industries.

According to Tescan, UniTOM HR is ideal for both industrial and academic researchers who want micro-CT imaging to examine a sample's internal structure as well as a deeper knowledge of the sample's behavior under various environmental circumstances.

Market Dynamics:

Driver:

Continuous advancements in Micro-CT technology

Ongoing innovations, including improved spatial resolution, faster imaging capabilities, and enhanced image quality, have expanded the application scope across industries. The market has experienced heightened demand as researchers and industries

leverage the latest technological features for precise materials analysis, preclinical research, and non-destructive testing. Thus, the evolution of Micro-CT technology has not only addressed existing challenges but has also sparked new possibilities, fostering a dynamic landscape that attracts investments and promotes its integration as a vital imaging tool in various scientific and industrial domains.

Restraint:

Competition from alternative imaging technologies

Depending on specific requirements, users may opt for alternative modalities, potentially hindering Micro-CT adoption. Each imaging technology has its strengths and limitations, and the perceived advantages of alternatives may divert attention from Micro-CT. This competition may slow market growth, particularly in applications where alternative technologies offer advantages, affecting Micro-CT's market share and positioning impeding the market.

Opportunity:

Growing awareness of 3D imaging

As industries and research sectors recognize the advantages of detailed, high-resolution 3D visualization for accurate analysis of internal structures, the demand for Micro-CT has surged. Its widespread adoption in materials science, preclinical research, healthcare, and industrial applications reflects the pivotal role it plays in providing comprehensive insights. The heightened awareness has stimulated technological advancements and increased research funding, positioning Micro-CT as a key player in non-invasive imaging solutions across diverse fields.

Threat:

Limited field of view and sample size

Researchers and industries requiring comprehensive imaging of sizable samples may opt for alternative technologies, limiting Micro-CT adoption. The challenge of accommodating diverse sample sizes reduces the versatility of Micro-CT, affecting its competitiveness against imaging solutions capable of handling broader ranges of specimen dimensions hampering the market growth.

Covid-19 Impact

Disruptions in supply chains, project delays, and budget constraints have led to a slowdown in equipment purchases. With laboratories facing closures and prioritizing essential research, demand for non-urgent applications, like certain preclinical studies or materials research, has decreased. Travel restrictions also hindered on-site installations and maintenance. Economic uncertainties and reduced research funding further contributed to a challenging environment.

The geological studies segment is expected to be the largest during the forecast period

The geological studies segment is estimated to have a lucrative growth, due to driving demand for non-destructive imaging in analyzing rock and mineral structures. Micro-CT technology plays a crucial role in geological research, providing detailed 3D images for studying subsurface features, porosity, and composition. This application aids geoscientists in understanding geological formations, reservoir characterization, and environmental assessments boost the market growth.

The diagnostic imaging labs segment is expected to have the highest CAGR during the forecast period

The diagnostic imaging labs segment is anticipated to witness the highest CAGR growth during the forecast period, due to increasing demand for advanced imaging technologies. These labs leverage Micro-CT for precise and non-invasive imaging in fields such as medicine, dentistry, and preclinical research. The technology's ability to provide high-resolution 3D images contributes to diagnostic accuracy and research advancements, fostering growth in the market.

Region with largest share:

Asia Pacific is projected to hold the largest market share during the forecast period due to increasing research activities, industrialization, and technological advancements. Countries like China, Japan, and South Korea are key contributors, driven by expanding applications in materials science, biomedical research, and industrial inspection. Overall, the Asia Pacific market is poised for continued development, fueled by a diverse range of applications across scientific disciplines and industries.

Region with highest CAGR:

North America is projected to have the highest CAGR over the forecast period, owing to strong investments in R&D, especially in the United States and Canada, support innovation and technological advancements in Micro-CT systems. Industries, including aerospace and automotive, leverage Micro-CT for quality control and materials analysis. Despite challenges, the North America Micro-CT market is positioned for continued expansion, driven by a diverse range of applications.

Key players in the market

Some of the key players in the Micro Computed Tomography Market include Baker Hughes Company, BehinNegareh, Bruker Corporation, Carl Zeiss AG, K.A. Imaging, MILabs B.V., NeoScan , North Star Imaging Inc., PerkinElmer, ProCon X-Ray GmbH, R.X. Solutions, Ray Co., Ltd, Rigaku Corporation, Sanying Precision Instruments Co. Ltd, SCANCO Medical AG, Shimadzu Corporation, TESCAN, Thermo Fisher Scientific , WENZEL Metrology GmbH and YXLON International GmbH

Key Developments:

In January 2024, Biognosys Expands US Footprint with New Proteomics CRO Facility in Massachusetts, The Massachusetts facility will initially focus on TrueDiscovery® data-independent acquisition (DIA) discovery proteomics services that offer biopharma researchers

In December 2023, Baker Hughes an energy technology company announced a 20-year framework agreement with Chevron Australia Pty Ltd. Baker Hughes will offer its innovative Aptara Subsea production systems for Chevron Australia's future offshore developments.

In November 2023, Energy technology company Baker Hughes announced the launch of its new PythonPipe™ portfolio, the latest in reinforced thermoplastic pipe (RTP) technology that enables faster installation, reduced time to first production and lower lifecycle emissions.

Products Covered:

In-Vivo

In-Vitro

Components Covered:

Detector

X-ray Source

Image Reconstruction Software

Control & Analysis Software

Collimators & Filters

Accessories & Consumables

Other Components

Applications Covered:

Food Studies

Geological Studies

Medical Devices

Cancer Studies

Electronics

Other Applications

End Users Covered:

Diagnostic Imaging Labs

Dental Laboratories

Research Institutes

Industries

Other End Users

Regions Covered:

North America

US

Canada

Mexico

Europe

Germany

UK

Italy

France

Spain

Rest of Europe

Asia Pacific

Japan

China

India

Australia

New Zealand

South Korea

Rest of Asia Pacific

South America

Argentina

Brazil

Chile

Rest of South America

Middle East & Africa

Saudi Arabia

UAE

Qatar

South Africa

Rest of Middle East & Africa

What our report offers:

- Market share assessments for the regional and country-level segments
- Strategic recommendations for the new entrants
- Covers Market data for the years 2023, 2024, 2025, 2026, 2027, 2028, 2030, 3032 and 2034
- Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)
- Strategic recommendations in key business segments based on the market estimations

- Competitive landscaping mapping the key common trends
- Company profiling with detailed strategies, financials, and recent developments
- Supply chain trends mapping the latest technological advancements

Free Customization Offerings:

All the customers of this report will be entitled to receive one of the following free customization options:

Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

Contents

1 EXECUTIVE SUMMARY

2 PREFACE

- 2.1 Abstract
- 2.2 Stake Holders
- 2.3 Research Scope
- 2.4 Research Methodology
 - 2.4.1 Data Mining
 - 2.4.2 Data Analysis
 - 2.4.3 Data Validation
 - 2.4.4 Research Approach
- 2.5 Research Sources
 - 2.5.1 Primary Research Sources
 - 2.5.2 Secondary Research Sources
 - 2.5.3 Assumptions

3 MARKET TREND ANALYSIS

- 3.1 Introduction
- 3.2 Drivers
- 3.3 Restraints
- 3.4 Opportunities
- 3.5 Threats
- 3.6 Product Analysis
- 3.7 Application Analysis
- 3.8 End User Analysis
- 3.9 Emerging Markets
- 3.10 Impact of Covid-19

4 PORTERS FIVE FORCE ANALYSIS

- 4.1 Bargaining power of suppliers
- 4.2 Bargaining power of buyers
- 4.3 Threat of substitutes
- 4.4 Threat of new entrants
- 4.5 Competitive rivalry

5 GLOBAL MICRO COMPUTED TOMOGRAPHY MARKET, BY PRODUCT

- 5.1 Introduction
- 5.2 In-Vivo
- 5.3 In-Vitro

6 GLOBAL MICRO COMPUTED TOMOGRAPHY MARKET, BY COMPONENT

- 6.1 Introduction
- 6.2 Detector
- 6.3 X-ray Source
- 6.4 Image Reconstruction Software
- 6.5 Control & Analysis Software
- 6.6 Collimators & Filters
- 6.7 Accessories & Consumables
- 6.8 Other Components

7 GLOBAL MICRO COMPUTED TOMOGRAPHY MARKET, BY APPLICATION

- 7.1 Introduction
- 7.2 Food Studies
- 7.3 Geological Studies
- 7.4 Medical Devices
- 7.5 Cancer Studies
- 7.6 Advanced Materials
- 7.7 Electronics
- 7.8 Orthopedics
- 7.9 Other Applications

8 GLOBAL MICRO COMPUTED TOMOGRAPHY MARKET, BY END USER

- 8.1 Introduction
- 8.2 Diagnostic Imaging Labs
- 8.3 Dental Laboratories
- 8.4 Research Institutes
- 8.5 Industries
- 8.6 Other End Users

9 GLOBAL MICRO COMPUTED TOMOGRAPHY MARKET, BY GEOGRAPHY

9.1 Introduction

9.2 North America

9.2.1 US

9.2.2 Canada

9.2.3 Mexico

9.3 Europe

9.3.1 Germany

9.3.2 UK

9.3.3 Italy

9.3.4 France

9.3.5 Spain

9.3.6 Rest of Europe

9.4 Asia Pacific

9.4.1 Japan

9.4.2 China

9.4.3 India

9.4.4 Australia

9.4.5 New Zealand

9.4.6 South Korea

9.4.7 Rest of Asia Pacific

9.5 South America

9.5.1 Argentina

9.5.2 Brazil

9.5.3 Chile

9.5.4 Rest of South America

9.6 Middle East & Africa

9.6.1 Saudi Arabia

9.6.2 UAE

9.6.3 Qatar

9.6.4 South Africa

9.6.5 Rest of Middle East & Africa

10 KEY DEVELOPMENTS

10.1 Agreements, Partnerships, Collaborations and Joint Ventures

10.2 Acquisitions & Mergers

10.3 New Product Launch

10.4 Expansions

10.5 Other Key Strategies

11 COMPANY PROFILING

11.1 Baker Hughes Company

11.2 BehinNegareh

11.3 Bruker Corporation

11.4 Carl Zeiss AG

11.5 K.A. Imaging

11.6 MILabs B.V.

11.7 NeoScan

11.8 North Star Imaging Inc.

11.9 PerkinElmer

11.10 ProCon X-Ray GmbH

11.11 R.X. Solutions

11.12 Ray Co., Ltd

11.13 Rigaku Corporation

11.14 Sanying Precision Instruments Co. Ltd

11.15 SCANCO Medical AG

11.16 Shimadzu Corporation

11.17 TESCAN

11.18 Thermo Fisher Scientific

11.19 WENZEL Metrology GmbH

11.20 YXLON International GmbH

List Of Tables

LIST OF TABLES

Table 1 Global Micro Computed Tomography Market Outlook, By Region (2023-2034) (\$MN)

Table 2 Global Micro Computed Tomography Market Outlook, By Product (2023-2034) (\$MN)

Table 3 Global Micro Computed Tomography Market Outlook, By In-Vivo (2023-2034) (\$MN)

Table 4 Global Micro Computed Tomography Market Outlook, By In-Vitro (2023-2034) (\$MN)

Table 5 Global Micro Computed Tomography Market Outlook, By Component (2023-2034) (\$MN)

Table 6 Global Micro Computed Tomography Market Outlook, By Detector (2023-2034) (\$MN)

Table 7 Global Micro Computed Tomography Market Outlook, By X-ray Source (2023-2034) (\$MN)

Table 8 Global Micro Computed Tomography Market Outlook, By Image Reconstruction Software (2023-2034) (\$MN)

Table 9 Global Micro Computed Tomography Market Outlook, By Control & Analysis Software (2023-2034) (\$MN)

Table 10 Global Micro Computed Tomography Market Outlook, By Collimators & Filters (2023-2034) (\$MN)

Table 11 Global Micro Computed Tomography Market Outlook, By Accessories & Consumables (2023-2034) (\$MN)

Table 12 Global Micro Computed Tomography Market Outlook, By Other Components (2023-2034) (\$MN)

Table 13 Global Micro Computed Tomography Market Outlook, By Application (2023-2034) (\$MN)

Table 14 Global Micro Computed Tomography Market Outlook, By Food Studies (2023-2034) (\$MN)

Table 15 Global Micro Computed Tomography Market Outlook, By Geological Studies (2023-2034) (\$MN)

Table 16 Global Micro Computed Tomography Market Outlook, By Medical Devices (2023-2034) (\$MN)

Table 17 Global Micro Computed Tomography Market Outlook, By Cancer Studies (2023-2034) (\$MN)

Table 18 Global Micro Computed Tomography Market Outlook, By Advanced Materials

(2023-2034) (\$MN)

Table 19 Global Micro Computed Tomography Market Outlook, By Electronics

(2023-2034) (\$MN)

Table 20 Global Micro Computed Tomography Market Outlook, By Orthopedics

(2023-2034) (\$MN)

Table 21 Global Micro Computed Tomography Market Outlook, By Other Applications

(2023-2034) (\$MN)

Table 22 Global Micro Computed Tomography Market Outlook, By End User

(2023-2034) (\$MN)

Table 23 Global Micro Computed Tomography Market Outlook, By Diagnostic Imaging Labs (2023-2034) (\$MN)

Table 24 Global Micro Computed Tomography Market Outlook, By Dental Laboratories (2023-2034) (\$MN)

Table 25 Global Micro Computed Tomography Market Outlook, By Research Institutes (2023-2034) (\$MN)

Table 26 Global Micro Computed Tomography Market Outlook, By Industries (2023-2034) (\$MN)

Table 27 Global Micro Computed Tomography Market Outlook, By Other End Users (2023-2034) (\$MN)

Note: Tables for North America, Europe, APAC, South America, and Middle East & Africa Regions are also represented in the same manner as above.

I would like to order

Product name: Micro Computed Tomography Market Forecasts to 2034 – Global Analysis By Product (In-Vivo and In-Vitro), Component, Application, End User and By Geography

Product link: <https://marketpublishers.com/r/M92D2C25F3C4EN.html>

Price: US\$ 4,150.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/M92D2C25F3C4EN.html>