

Terahertz Technology Market Revenue to Cross US\$ 1,841.7 million by 2028: The Insight Partners

Growing Use of Terahertz System in the Semiconductor Industry to Provide Opportunities for Terahertz Technology Market during 2021-2028



NEW YORK, UNITED STATES, April 11, 2023 /EINPresswire.com/

-- The [Terahertz Technology Market](#) is expected to experience significant growth in the coming years, according to a market study by The Insight Partners. The study projects that the market will reach a value of US\$1,841.7 million by 2028, up from US\$321.0 million in 2021, with a compound annual growth rate (CAGR) of 28.3% from 2021 to 2028. The report also examines the impact of COVID-19 on the market and provides insights into the market's components, type, application, and geographic segments.

Report Coverage - Terahertz Technology Market

Report Coverage Details

Market Size Value in US\$ 321.0 million in 2021

Market Size Value by US\$ 1,841.7 million by 2028

Growth rate CAGR of 28.3% from 2021 to 2028

Forecast Period 2021-2028

Base Year 2021

No. of Pages 163

No. of Tables 83

No. of Charts & Figures 84

Historical data available Yes

Segments Covered Component, Type, and Application

Regional scope North America, Europe, Asia Pacific, Middle East & Africa, South & Central America

Country scope US, Canada, Mexico, UK, Germany, Spain, Italy, France, India, China, Japan, South Korea, Australia, UAE, Saudi Arabia, South Africa, Brazil, Argentina

Report Coverage Revenue forecast, company ranking, competitive landscape, growth factors, and trends

Download a Sample Copy of this Report at –

<https://www.theinsightpartners.com/sample/TIPTE100001364/>

The use of ionizing radiation (X-rays) is critical for quality control and nondestructive testing because of its detrimental effect on biological agents. Thus, terahertz imaging technology is proving beneficial in the food industry. Instead of using X-ray machines, food manufacturers and packagers can use terahertz food scanners in various areas, such as checking whether a pick-and-place robotic arm has placed all candy bars inside the carton. The terahertz imagers can see through cardboard or PE packaging—chocolate bars could be wrapped in any material, even in metal foil that is impervious to the terahertz rays. Thus, such materials create even better contrast in the terahertz images. Also, insects and other foreign objects found in food are a severe cause of concern to consumers, food producers, and retailers.

Unwrapping a chocolate bar could reveal an unpleasant surprise, like an insect, metal or glass pieces, or dirt clots. This can not only kill the appetite of the consumer but also harm them physically via a broken tooth or poisoning. Moreover, in some countries, producers or retailers may end up being sued, potentially leading to fines and lawsuits worth millions of dollars. Several tests have specifically been designed for the food industry to detect the presence of foreign objects (e.g., insects, pieces of plastic, metal, stones, or soil) in the food products. For example, TeraSense Group's terahertz imaging systems can easily detect a common housefly in multiple polyethylene bags, even if the total thickness of such PET coating exceeds 20 mm.

Also, TeraSense imaging systems reveal carcinogenic mycotoxin fungus contaminating peanuts, corn, hazelnuts, and other grain crops and oil plants. Further, terahertz imagers also allow industrial customers to detect any signs of infections such as *Aspergillus flavus* and *A. parasiticus*, which exude carcinogenic Aflatoxin B1. Thus, the use of terahertz technology in the food industry is a significant opportunity for the growth of the terahertz technology market players during the forecast period.

Inquire before Buying at - <https://www.theinsightpartners.com/inquiry/TIPTE100001364/>

Key Findings of Study:

The global terahertz technology market is segmented into five major regions—North America, Europe, Asia Pacific, the Middle East and Africa, and South America. Based on components, the terahertz technology market is bifurcated into terahertz sources and terahertz detectors. The terahertz detectors segment held a larger market share in 2020. Based on type, the market is segmented into terahertz imaging systems, terahertz spectroscopy systems, and terahertz communication systems. Based on application, the market is segmented into medical and healthcare, defense and security, food and agriculture, industrial, semiconductor, and others.

Terahertz band communication is conceived as the key technology in meeting the need for high data rates. Wireless terabit per second links are expected to become a reality soon due to the

broad availability of bandwidth at the terahertz band. Terahertz waves are characterized by a wide frequency band, high speed, small scattering, high penetrability, good directionality, high safety, and so on. They serve as another frequency band of communication between microwave communication and laser communication. Besides, recent advancements in the terahertz technology—such as electronic approach III-V semiconductor technologies and optical Quantum Cascade Lasers—allow frequency generation from 0.34 terahertz to 1 terahertz with power from 1 mW to 10 mW. Thus, the use of terahertz technology in satellite communication is expected to emerge as one of the significant trends boosting the market growth during the forecast period.

Terahertz Technology Market: Competitive Landscape and Key Developments

Acal BFi UK Ltd; Advanced Photonix, Inc.; Advantest Corporation; HÜBNER GmbH & Co. KG; Luna Innovations, Inc.; Menlo Systems GmbH; Microtech Instrument, Inc.; Terasense Group Inc.; TeraView limited; and Toptica Photonics AG are among the key players profiled during this market study. In addition to these players, several other essential market players were studied and analyzed to get a holistic view of the global terahertz technology market and its ecosystem.

Buy Complete Report at - <https://www.theinsightpartners.com/buy/TIPTE100001364/>

About Us:

The Insight Partners is a one-stop industry research provider of actionable intelligence. We help our clients in getting solutions to their research requirements through our syndicated and consulting research services. We specialize in industries such as Semiconductors and Electronics, Aerospace and Defense, Automotive and Transportation, Biotechnology, Healthcare IT, Manufacturing and Construction, Medical Devices, Technology, Media and Telecommunications, and Chemicals and Materials.

Contact Us:

If you have any queries about this report or if you would like further information, please contact us:

Contact Person: Sameer Joshi

E-mail: sales@theinsightpartners.com

Phone: +1-646-491-9876

Sameer Joshi

The Insight Partners

9666111581

[email us here](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/627240489>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2023 Newsmatics Inc. All Right Reserved.