Microbolometer Market is estimated to reach US$811.873 million by 2028 at a CAGR of 9.06%

The microbolometer market is anticipated to grow at a CAGR of 9.06% from US$442.308 million in 2021 to US$811.873 million by 2028.

NOIDA, UTTAR PARDESH, INDIA, December 1, 2023 /EINPresswire.com/ -- According to a new study published by Knowledge Sourcing Intelligence, the microbolometer market is projected to grow at a CAGR of 9.06% between 2021 and 2028 to reach US$811.873 million by 2028.

The key driving force behind the rapid growth of the global microbolometer market is the growing automotive sector and the growing application of microbolometers in the aerospace and defense industry. For instance, In 2021, Lynred, a prominent global supplier of infrared detectors for aerospace, defense, and commercial sectors, launched upgraded functionalities spanning its entire array of 12 µm infrared detectors. These enhancements aim to empower optronics systems to achieve greater precision when identifying objects within low-contrast scenes. Leveraging microbolometer technology, these 12 µm pixel pitch infrared detectors offer heightened thermal sensitivity, expanding their applicability across a wide spectrum of uses.

> The microbolometer market is anticipated to grow at a CAGR of 9.06% from US$442.308 million in 2021 to US$442.308 million by 2028."
>
> *Knowledge Sourcing Intelligence*

A microbolometer is a tiny, heat-sensitive detector that converts infrared radiation (heat) emitted by objects into electrical signals. This allows the device to create thermal images by capturing and interpreting the varying heat signatures of objects within its field of view. Bolometers are versatile devices with a wide range of applications, from consumer electronics like smartphones and drones to fire detection and suppression, night vision systems, and many more.

The market is observing many product launches and advancements. For instance, in September 2023, BAE launched enhanced capabilities for its TWV640 thermal camera core, tailored for manufacturers creating thermal imaging solutions across defense, space, and commercial

sectors. This technology finds application in security and surveillance, firefighting vision systems, automotive cameras, and various other fields. At its core, the TWV640 relies on BAE Systems' Athena™ 640 focal plane array, leveraging an uncooled long wave infrared microbolometer. Also, in June 2023, Sierra-Olympic Technologies launched its new Vayu HD camera, weighing 475 grams and sized compactly to fit in the palm of a hand. This camera stands out as the world's premier Full HD 1920 x 1200 x 12µm uncooled VOX Microbolometer Array.

Access sample report or view details: https://www.knowledge-sourcing.com/report/global-microbolometer-market

The global microbolometer market, based on material, is segmented into two main categories namely vanadium oxide (VOx) and amorphous silicon (a-Si). Microbolometers employ vanadium oxide (VOx) as the active material for their infrared detection capabilities. Vanadium oxide possesses unique properties that make it well-suited for use in microbolometer arrays.

The global microbolometer market, based on its application, is divided into four segments, which include aerospace and defense, automotive, video surveillance, and thermography. The integration of microbolometer-based thermal imaging systems in automobiles contributes to improving safety, enhancing driving experience, and advancing the capabilities of modern vehicles.

Asia Pacific is poised to experience substantial growth owing to the growing electronic and automotive industry in the region, particularly in countries like China and India. For instance, according to the State Council of the People's Republic of China, the automobile manufacturing industry in China showcased steady growth in the initial three quarters of 2023. Throughout this timeframe, the industrial added-value within this sector witnessed an 11.4 percent year-on-year increase. Simultaneously, the collective operating revenue of companies operating in this industry reached 7.11 trillion yuan, marking a 10.4 percent surge compared to the corresponding period in the previous year.

The research includes coverage of BAE Systems, Teledyne DALSA (Teledyne Technologies), Raytheon Company (RTX Corporation), Fraunhofer IMS, Lynred (Thales Group & Safron S.A), SCD USA Infrared LLC (SCD) as the significant market players in the global microbolometer market.

The market analytics report segments the microbolometer market using the following criteria:

- By Material

o Vanadium Oxide (VOx)
o Amorphous Silicon (a-Si)

- By Application

- Aerospace and Defense
- Automotive
- Video Surveillance
- Thermography

- By Geography

- North America

- United States
- Canada
- Mexico

- South America

- Brazil
- Argentina
- Others

- Europe

- Germany
- France
- United Kingdom
- Others

- Middle East and Africa (MEA)

- Saudi Arabia
- South Africa

- Asia Pacific

- China
- India
- Japan
- Others

Companies Profiled:

- BAE Systems
- Teledyne DALSA (Teledyne Technologies)
- Raytheon Company (RTX Corporation)

- Fraunhofer IMS
- Lynred (Thales Group & Safron S.A)
- SCD USA Infrared LLC (SCD)

Explore More Reports:

- Multimeter Market: https://www.knowledge-sourcing.com/report/multimeter-market
- Bolometer Market: https://www.knowledge-sourcing.com/report/bolometer-market
- Dosimeter Market: https://www.knowledge-sourcing.com/report/dosimeter-market

Ankit Mishra
Knowledge Sourcing Intelligence LLP
+1 850-250-1698
email us here
Visit us on social media:
Facebook
Twitter
LinkedIn
