



Frost & Sullivan Applauds Quanergy for Developing Innovative LiDARs that Address the Shortcomings of Conventional LiDARs

Quanergy's technological superiority in producing solid-state LiDAR and its extensive Stage Gate review process give it a distinct competitive edge in the global market



MOUNTAIN VIEW, Calif., Aug. 19, 2015 /PRNewswire/ -- Based on its recent analysis of the light detection and ranging (LiDAR) market, Frost & Sullivan recognizes Quanergy Systems, Inc., (Quanergy) with the 2015 Global Frost & Sullivan Entrepreneurial Company of the Year Award. Deviating from the conventional approach of integrating costly LiDARs into heavy machinery, Quanergy has focused on producing user-friendly devices that can be integrated into handheld devices. The company's practice of adding analytical capabilities to its LiDARs has broadened the scope, thereby popularizing LiDAR usage in a number of diverse applications.

Quanergy's time-of-flight (TOF) LiDAR sensors for diverse industry verticals, including security surveillance, surveying and mapping, automotive, transportation infrastructure, and manufacturing and warehouse automation, have placed it in an enviable position in the market. Their design precision and proprietary sensing capabilities have earned them deployment opportunities in a market space dominated by mechanical solutions.

Quanergy's exclusive Stage Gate process, meant for managing product development processes and customer relationships, has played a key role in easing the complicated manufacturing process. The Stage Gate process helps in perfecting the final manufacturing outcome by specifically pointing out product limitations, implementing

core 3D mapping, integrating TOF technologies, incorporating product aesthetics and supply-chain mechanisms, and deploying expert resources and marketing plans.

Meanwhile, to bridge the gap between customers' requirements and supply, Quanergy has collaborated with experts from diverse industry verticals and assimilated their inputs into its production plans. For instance, due to its partnerships with market leaders in the automotive industry, the company recognized the limited scope of integrating LiDAR into the body of passenger vehicles, eliminating the negative impact of bulky mechanical LiDARs on aesthetics and aerodynamics.

"Acknowledging the high production expenditure and aesthetic challenges caused by the large size, heavy weight and high power consumption of mechanical LiDARs, Quanergy introduced its second-generation, solid-state detection and ranging sensors," said Frost & Sullivan Industry Principal Dr. Rajender Thusu. "This innovation has expedited the automotive industry's response to the demand for autonomous driving in passenger vehicles, lowered production costs, and offered auto makers the flexibility to incorporate design changes to vehicle safety systems."

Quanergy's three strategic steps for manufacturing best-in-class LiDARs are developing a critical understanding of Mega Trends, partnering with market leaders, and managing the product development process in detail. By perfectly combining the principles of Lean Manufacturing and Six Sigma, it has formulated a highly structured, gate review process that identifies anomalies at any stage of the product development lifecycle, thus enhancing customer satisfaction.

Preloaded with a user-friendly interface and extreme operational flexibility matched with plug-and-play features, Quanergy's technology provides customers with an effortless deployment experience. Apart from presenting stand-alone sensors, Quanergy's product line also boasts comprehensive sensing systems that facilitate the strategic placement of components such as the 3D LiDAR, global positioning system (GPS) receiver, inertial measurement unit (IMU), and human-machine interface (HMI) for 3D mapping and visualization.

Additionally, Quanergy provides customers with training to acquaint them with the numerous deployment options for LiDARs in various market verticals. Its strategy of leveraging personalized communication based on customers' purchase patterns has greatly aided its endeavor of expanding in the global market.

The diverse applications for Quanergy's product portfolio include smart homes, smart cities, robotics, construction/agriculture/mining vehicles, surveying, archaeology, geology, aeronautics, unmanned aerial vehicles (UAVs), wind turbine preservation and inspection, security, and disaster relief.

"Quanergy employs revolutionary 3D sensing and object recognition features to present users with a seamless real-time mapping and perception experience," observed Thusu. "Furthermore, its expertise in merging Big Data analytics and cloud processing capabilities has played a huge part in delivering a rich ownership experience to customers."

Each year, Frost & Sullivan presents this award to the company that has demonstrated excellence and entrepreneurial spirit in devising a strong growth strategy and robustly implementing it. The recipient has shown strength in terms of innovation in products and technologies, leadership in customer value, as well as speed in response to market needs. In short, the award looks at the emerging market players in the industry and recognizes their best practices that are positioned for future growth excellence.

Frost & Sullivan Best Practices Awards recognize companies in a variety of regional and global markets for demonstrating outstanding achievement and superior performance in areas such as leadership, technological innovation, customer service and strategic product development. Industry analysts compare market participants and measure performance through in-depth interviews, analysis and extensive secondary research to identify best practices in the industry.

About Quanergy Systems, Inc.

Quanergy Systems, Inc. ([Quanergy](#)) was founded in 2012 and builds on decades of experience of its team in the areas of optics, photonics, optoelectronics, artificial intelligence software, and control systems. Headquartered in Sunnyvale, California, in the heart of Silicon Valley, Quanergy offers the world's leading LiDAR sensors and software for real-time capture and processing of 3D mapping data and object detection, tracking, and classification. In transportation, the data is utilized to greatly improve the accuracy and reliability of on-board driver safety systems and enhance them with perception, scenario analysis, and decision making capability for active control, as well as enable autonomous driving in the future. Quanergy's LiDARs lead in all six key commercialization areas (price, performance, reliability, size, weight, power consumption) while meeting the mass deployment requirement of being solid state. The solutions enable smart automation in numerous industry verticals where they improve safety, efficiency, and performance, while reducing operating expenses. Quanergy has established partnerships with global automotive, mining, mapping, logistics, robotics, aeronautics, and security companies, and is expanding its market footprint into smart homes and 3D-aware consumer electronics.

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