QUANERGY®

Quanergy and Shanghai Rays Accelerate Shandong Port Group's Terminal Automation with 3D LiDAR Technology

- *Reduced more than 90% of work-related accidents in the bulk material operation*
- *Increased productivity by 20% compared to manual operation*
- *The 3D LiDAR solution provides real-time data, pinpoint accuracy, and long range to enable automation, drive safety and efficiency at one of world's busiest ports.*

March 2, 2021 (Sunnyvale, CA) — **Quanergy Systems, Inc.**, a leading provider of LiDAR (Light Detection and Ranging) sensors and smart perception solutions, today announced the installation of its M-Series 3D LiDAR solution for one of the largest port operators in the world, Shandong Port Group Co, Ltd. in China. Deployed in partnership with Shanghai Rays Information Technology Co, Ltd., the solution has increased port efficiency and safety and has already yielded a positive return on investment (ROI) by reducing the labor, costs, and risks associated with imprecise manual operations.

Quanergy's M-Series 3D LiDAR sensor solution was selected to fully automate the port's manual bulk material operation in the terminals. The solution provides real-time analysis of the ship, cabin, and stockpile shape to enable automatic unloading of solid materials and ensure safe operation. With clear visual displays, terminal operators can precisely evaluate stockpiles, obtain coordinates of cabins, define safe operation zones, move grab buckets to desired locations, and much more.

"With the great performance and quality of Quanergy's 3D LiDAR sensor, our system has resulted in tremendous improvement in operation efficiency and safety. We were able to eliminate more than 90% of work-related accidents and reduced the operation costs and losses by 25% for our port customers," said Xu Lin, Manager of Systems Design Department at Shanghai Rays Information Technology Co, Ltd.

Shandong Port Group chose the solution because of Quanergy's unique 3D LiDAR capabilities. The M-Series LiDAR sensor features high-density 3D point clouds and an industry-leading angular resolution of 0.033 degrees, which provide enhanced 3D visualization and extremely accurate real-time data collection. The heavy-duty industrial sensor operates reliably even in the harshest outdoor conditions such as rain, fog temperature and humidity ranges. Furthermore, the

360º field of view and 200-meter scanning range provide complete coverage of scanned areas using just a few sensors.

"Port automation through the installation of special equipment, such as Quanergy's LiDAR technology, is a growing trend within the operation of global port terminals," said Tony Rigoni, Director of Industrial Market Development and Alliances at Quanergy, "The exceptional results from the installation in the Shandong Port Bulk Terminal demonstrate how LiDAR can accelerate port automation and provide tangible benefits for a wide range of industrial applications."

To view the case study on Quanergy's Full Automation of the Shandong Port Group's Bulk Terminal, visit https://bit.ly/3dRrPrJ .

About Quanergy Systems, Inc.

Quanergy Systems, Inc. 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 a high-performance AI-powered LiDAR platform designed to accelerate the automation of key business processes to increase productivity, efficiency, and safety of our 3D world. By providing actionable insights to organizations across major industries including, mapping, security, smart cities, and smart spaces, industrial automation and transportation, Quanergy is enabling its partners and their end-users to deploy innovative solutions to drive their business growth and ultimately, improve the quality of life for people around the world. For more information, visit www.quanergy.com.

About Shanghai Rays Information Technology Co., Ltd.

上海冉青公司是一家高新技术型企业。主营电气控制系统集成，智能远程可视化运维中心

及全自动无人值守系统工程，是中国知名的电控系统集成商和物流自动化业务专家。

Shanghai Rays Information Technology Co., LTD. is a high-tech company focusing on electrical control system integration, intelligent visualized remote operation center and unmanned operation system. Shanghai Rays is one of the top experts for electrical control and logistic automation in China. For more information, visit www.rrays.com

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