

QUANTUM
SYSTEMS

YellowScan



Qube 640

The **Qube 640** is a **LiDAR** sensor with a **176° FOV**, integrated colorization through an **8MP** camera, enhanced vegetation penetration and vertical scanning.

The Qube 640 is co-developed with YellowScan for Trinity Pro and Tactical drones. It features a selectable FOV (field of view) of up to 176°. Combined with Trinity's capabilities, it enables 32 km corridor scanning with one single flight. At 120° FOV, it improves productivity by 50% compared to its predecessor, the Qube 240.

The sensor ensures improved vegetation penetration, detailing foliage and trunks, and facilitates vertical scanning applications with reduced outer edge mismatches, thanks to the new IMU. An integrated 8MP RGB camera enables LiDAR capture and colorization in the same flight.

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Technical Specifications

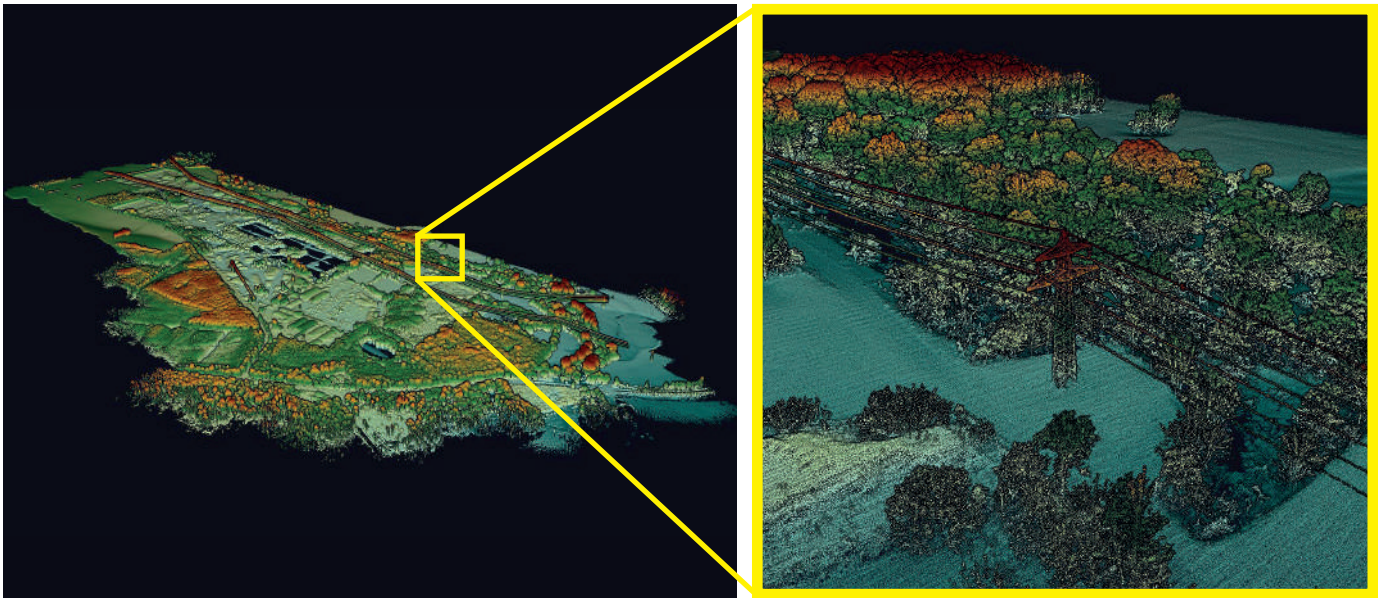


Scanner	Hesai XT32M2X
GNSS Inertial Solution	SBG Quanta Micro
Integrated Camera	8 MP (for colorization purposes)
Laser Range	300 m
Precision ^{1,3}	3 cm
Accuracy ^{2,3}	2.5 cm
Scanner FOV	176° x 40.3°
Shots per Second	640 000 points/sec
Echoes per Shot	Up to 3
Center Point Density @100m	34 -100 points/sqm
Max. Data Points generated ⁴	1 920 000 points/sec

¹ Precision, also called reproducibility or repeatability, accounts for the variation in successive measurements taken on the same target.
² Accuracy is the degree of conformity of a measured position to its actual (true) value.
³ 1 sigma @ 50 m, Nadir.
⁴ Triple Echo.

Sample Data

	Flight Altitude 75 m		FOV 120°		Flight Time 42 min
	Flight Speed 18 m/s		Area 170 ha		Overlap 80%



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