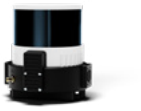
The fastest mapping drone just got LIDAR

Wingtra LIDAR sets new standards in aerial mapping. Experience unmatched efficiency with user-friendliness and reliability to win more bids and improve construction project designs.



LIDAR system
Easy-to-use, precise and efficient

Payload weight (incl. mount)	1030 g
Point density at 45 m AGL (single pass, single return)	110 pt/m²
Effective point density of deliverable at 45 m AGL with 50% side overlap	Hard surface: ~220 pts/m² (single return) Low vegetation: up to 440 pts/m² (dual return) High vegetation: up to 660 pts/m² (triple return)
Effective point density of deliverable at 90 m AGL with 50% side overlap	Hard surface: ~110 pts/m² (single return) Low vegetation: up to 220 pts/m² (dual return) High vegetation: up to 330 pts/m² (triple return)
Effective point density of deliverable at 120 m AGL with 50% side overlap	Hard surface: ~84 pts/m² (single return) Low vegetation: up to 168 pts/m² (dual return) High vegetation: up to 252 pts/m² (triple return)
Maximum coverage for highest density at 45 m (150 ft)	Up to 190 ha (470 ac) (30% side overlap)
Maximum coverage at 90 m (300 ft)	Up to 360 ha (890 ac) (30% side overlap)
Maximum coverage at 120 m (400 ft)	Up to 380 ha (930 ac) (30% side overlap)
Vertical absolute accuracy at 90 m (RMS)	Down to 3 cm (1.2 in)

Scanner

Laser scanner	XT32M2X
Field of view (horizontal)	90°
Field of view (vertical)	40.3°
Number of returns	3
Sensor type	Rotating sensor
Wavelength	905 nm
Range	0.5 - 300 m 80 m with 10% reflectivity (all channels)
Pulse	640 k/s (single return) 1280 k/s (double return) 1920 k/s (triple return)

IMU

Inertial measurement unit	Inertial Labs Tactical-Grade IMU-P
Pitch/roll accuracy	0.006°
Heading accuracy	0.03°

GNSS

GNSS system	NovAtel OEM7500
Constellations	GPS, GLONASS, BEIDOU, GALILEO
Position accuracy	0.5 cm
PPK	Yes

Software

Processing SW	Wingtra LIDAR app
Point cloud generation	LAS and LAZ
Trajectory correction	Yes