



RECON-XT

The **RECON-XT** is the ultimate value, entry-level system for the DJI Matrice 300. A strong fit for smaller scan areas and teams on a budget. The **RECON-XT** is designed to grow and adapt with your business.

Flexibility in mounting options is a key benefit of this Phoenix system. The **RECON-XT** is designed to fly on the DJI M300, and can also be adapted for vehicle and backpack configurations.

FEATURES

- » Ultralight LiDAR payload, designed for the DJI M300
- » Flexible Mounting: Mount on a drone, vehicle, or even backpack
- » Multi-Target Capacity—up to 2 target echoes per laser shot
- » Fast and accurate measurement 640k shots/s, up to 1.28M points/s



QUICK SPECS

Absolute Accuracy
2-5 cm RMSEz @ 80 m⁽¹⁾ (2) (4)

Intraswath Precision
4.5 cm RMSDz @ 80 m⁽¹⁾ (2) (3)

Weight
1.8kg / 3.9 lbs

Dimensions
20.7 x 12.1 x 15.7 (cm)

Scan Rate
5/10/20 Hz, up to 2 returns

Max DJI M300 Flight time
33 Minutes

APPLICATIONS

- UTILITIES MAPPING
- CONSTRUCTION SITE SURVEYING
- AGRICULTURE & FORESTRY MONITORING
- OPEN PIT MINING OPERATIONS
- STOCKPILE VOLUMETRICS
- GENERAL MAPPING

PLATFORM

OVERALL DIMENSIONS	20.7 x 12.1 x 15.7 (cm)
PAYLOAD WEIGHT	1.8kg / 3.97lbs
CAMERA FOV	70°
CAMERA RESOLUTION	24 MP
EXTERNAL STORAGE	256GB USB Drive included
OPERATING TEMPERATURE	0°C - +40°C

LiDAR SENSOR

LASER PROPERTIES	905 nm Class 1 (eye safe)
RANGE MAX	120 m
RMS RANGING ERROR	10 mm (Average within 0.5 - 70 m @ 50% reflectivity)
SCAN RATE	640k points/s, up to 1.28M points/s dual return mode
FIELD OF VIEW	+15° -16° Vertical / 360° Horizontal
MULTIPLE ECHOES	2
NUMBER OF LASERS	32
BEAM DIVERGENCE	2.29 mrad/1.52 mrad
LASER BEAM FOOTPRINT H x V	9 cm x 6 cm @ 40 m 14 cm x 9 cm @ 60 m 18 cm x 12 cm @ 80 m

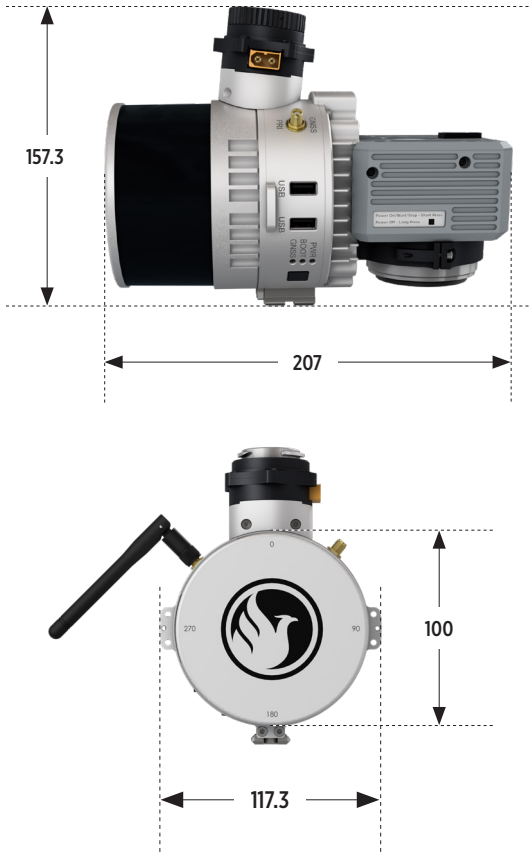
NAVIGATION SYSTEM

CONSTELLATION SUPPORT	GPS+GLONASS+BEIDOU +GALILEO
SUPPORT ALIGNMENT	Kinematic, Dual-Antenna (optional)
OPERATION MODES	Post-processing only
POSITION ACCURACY	0.5 cm (PPK Estimated)
ATTITUDE ACCURACY	<0.01° Pitch & Roll; <0.05° Heading

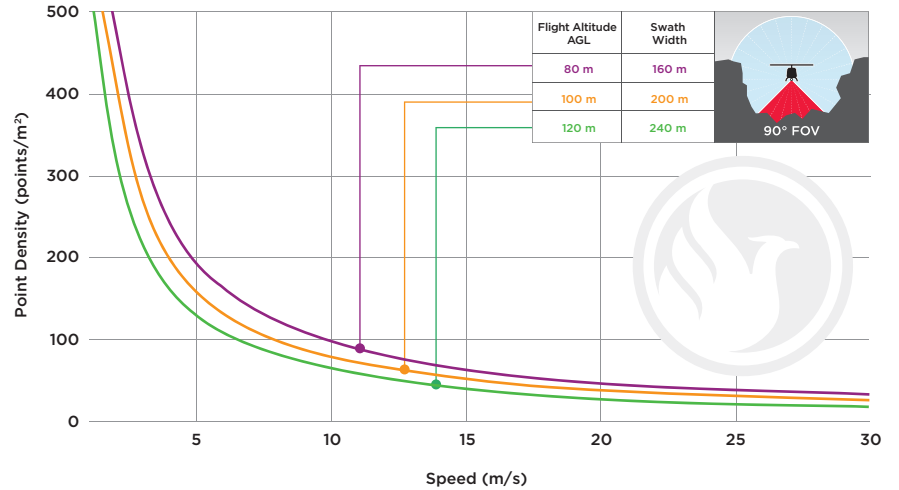
(1) Approximate values based on PLS test condition. (2) Using a 90° downward field of view. (3) Range of elevation values on flat surfaces with >20% reflectivity at the laser's wavelength.

(4) Expected RMSEz when following the PLS recommended acquisition & processing workflow and ASPRS check point guidelines.

RECON-Xt DIMENSIONS (mm)



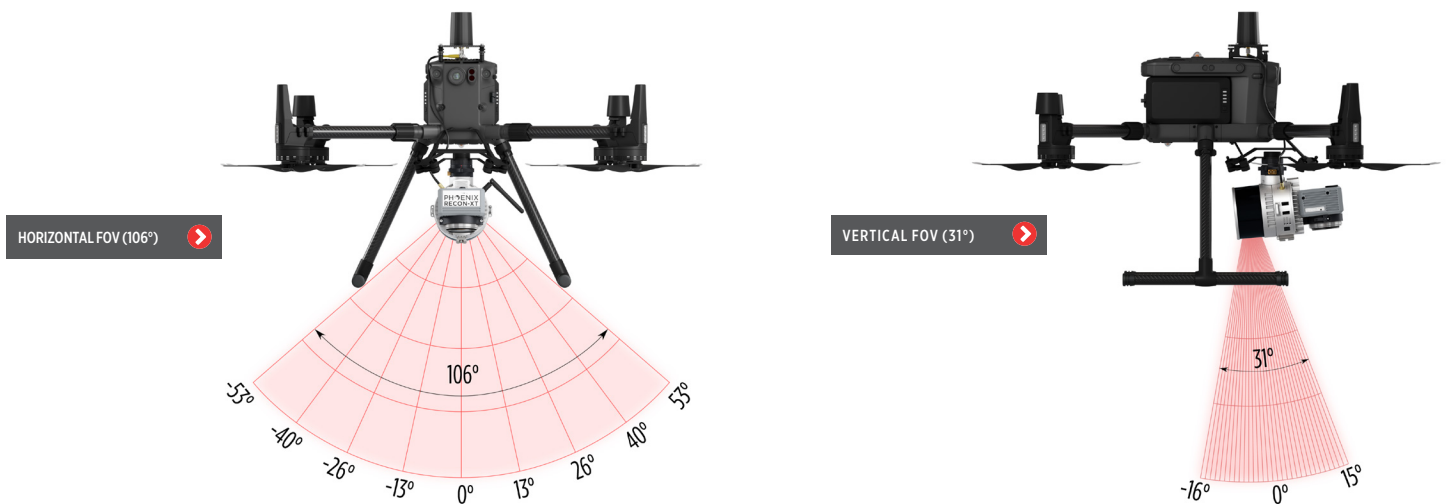
POINT DENSITY RECON-Xt



Flight AGL (m)	80	100	120
Speed (m/s)	Covered Area: 20% Flightline Overlap (ha/ac)		
6	138/342	173/427	207/512
10	230/569	288/712	346/854
Speed (m/s)	Covered Area: 50% Flightline Overlap (ha/ac)		
6	86/213	108/267	130/320
10	144/356	180/445	216/534
Swath Width	160 m	200 m	240 m

1) Assuming 30 min flight time 2) 90 deg downward FOV

RECON-Xt FOV



EXPLORE A PHOENIX LiDAR SYSTEM FOR YOUR TEAM, CONTACT US!

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