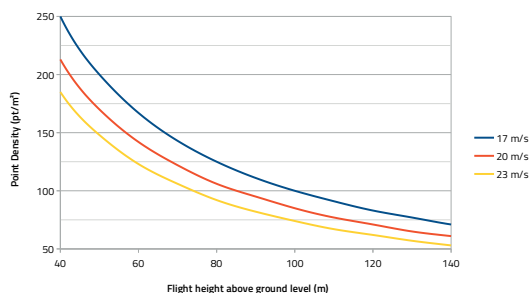# Trinity F90+

quantum *systems*

QUBE 240
Geomatics Grade LiDAR

TECHNICAL DATA
QUBE 240

- Class 1 (Eye Safe)
- Wavelength: 905 nm
- Maximum altitude: 140 m AGL
- Suggested altitude: 100 m AGL
- Precision: 1.8 - 2.5 cm*
- Accuracy: < 3 cm**
- Scanner field of view: 70°
- 240,000 shots per second
- Point density @100 m: 50 - 100 points/m²
- Multi-echo technology: up to 3 echoes per shot
- Applanix POSPacTM UAV, GNSS and INS software for PPK
- Qube 240 data processing software to generate survey grade LAS Files

Point density by ground speed and altitude

Point Density (pt/m²) vs Flight height above ground level (m)

— 17 m/s
— 20 m/s
— 23 m/s

TECHNICAL DATA
TRINITY F90+ INCL. LiDAR QUBE 240

Max. Take-off weight	5.4 kg (11.9 lbs)
Max. Flight time	60 min[1]
Max. Range = Area	70 km = 500 ha
Maximum flight altitude	3500 m[1] MSL
Command and control range	5 – 7.5 km (3.1 – 4.7 mi)
Cruise speed	18 m/s (35 kn)
Wind tolerance (ground)	up to 6 m/s (11.7 kn) < 1500 m MSL [2] up to 5 m/s (9.6 kn) < 3000 m MSL [2]
Wind tolerance (cruise)	12 m/s (23.3 kn)
Operating temperature range	-12 °C to 50 °C (10.4 °F to 122 °F)
Wingspan	2.394 m (7.85 ft)
Transport case dimension	1002 x 830 x 270 mm (39.4 x 32.7 x 10.6 inch)

*Precision, also called reproducibility or repeatability, accounts for the variation in successive measurements taken on the same target. Depends on altitude AGL.
**Accuracy is the degree of conformity of a measured position to its actual (true) value.
1 Please be aware that the flight time and max. wind tolerance are reduced with increasing flight altitude. For further details read the user manual chapter 11.5.2.
2 Please be aware that the max. wind tolerance is reduced with increasing flight altitude.

ISOLATORS