

A comparison of fixed-wing mapping drones



	DeltaQuad Pro #MAP	WingtraOne Gen II	Trinity F90+	Marlyn	eBee X
Platform type ¹	Redundant VTOL	Tailsitter VTOL	Tiltrotor VTOL	Tailsitter VTOL	Fixed-wing
Max. flight time ²	110 minutes	59 minutes	90 minutes	50 minutes	60/90 minutes
Coverage at 3cm/px ³	1200 ha	400 ha	700 ha	600 ha	220 ha/ 500 ha
Precision	<1 cm	<1 cm	<2 cm	<1 cm	>3 cm
Wingspan ⁴	235 cm	125 cm	239 cm	160 cm	116 cm
Control range	10/30/50 km/ unlimited	10 km	7.5 km	7/20 km	8 km
Max. resolution	61 megapixel	42 megapixel	42 megapixel	61 megapixel	24 megapixel
Live video ⁵	☑	☒	☒	☒	☒
Swappable payloads	☑	☑	☑	☑	☑
Comparative package price ⁶	42MP: 19.593,00 61MP: 20.993,00	42MP: 29.600,00	42MP: 21.990,00	42MP: 29.450,00	24MP: 22.550,00

1 VTOL UAVs take off and land vertically. To do so and to cruise, redundant VTOLs use two propulsion systems, ensuring safe operation. Tailsitters and tiltrotors use only one propulsion system.

2 The maximum flight time for fixed-wing mapping drones depends on the altitude above sea level. Here it is calculated at sea level with camera payload.

3 The coverage is calculated by multiplying the maximum flight distance by the maximum camera resolution. It is based on 3CM per pixel with an overlap of 50%.

4 Greater wingspans contribute to increased stability during flight and can generate more lift, which allows to carry heavier payloads. However, they might also decrease maneuverability and portability.

5 Displays a live HD video stream of the mapping camera during flight on the Ground Control Station. This feature is useful to verify the camera payload is functioning and set correctly.

6 To compare pricing, a package was selected for each model that most closely resembles: (1) 42MP camera, (2) 1 cm PPK (if available), (3) 2 Batteries (4) Standard radio solution, (5) Ground Control Station (if available). Prices were last updated in May 2021 and are subject to change.