## A comparison of VTOL mapping drones

	DeltaQuad Pro #MAP	Wingtra WingtraOne	AtmosUAV Marlyn
Coverage at 3cm/px	1000ha	400ha	300ha
Coverage at 10cm/px	3500ha	1800ha	1100ha
Lowest ground resolution	0.4 cm/px	0.7 cm/px	0.7 cm/px
Payload capacity	1200g	800g	1000g
Max telemetry range	20 km / Unlimited (4G)	8 km	3 km
Setup time	1 minute	5 minutes	7 minutes
Preflight calibrations	None	Airspeed sensor	Airspeed sensor
Manual remote control required	No	Yes	Yes
4G/LTE support	Yes	No	No
FPV video support	Yes	No	No
Simulator included	Yes	No	No
Backpack included	No	Yes	Yes
Flight redundancy (separated drives)	Yes	No	No
Swappable payloads	Yes	Yes	No
Supported cameras	Sony A7R-III Sony RX1R-II Sony A6000 Micasense RedEdge MapIR Survey3 Flir Duo Pro R	Sony RX1R-II Sony QX1 Micasense RedEdge	Sony RX1R-II Sony QX1 Micasense RedEdge
Dry weight	5.0 Kg	3.7 Kg	5.7 Kg
Wing span	235 cm	125 cm	160 cm
Max flight distance	100 km	50 km	30 km
Max flight time	110 minutes	55 minutes	50 minutes
Max cruise wind specified	45 km/h	40 km/h	45 km/h
Max takeoff & landing wind specified	33 km/h	30 km/h	Not specified
Effective max wind for mapping *	30 km/h	30 km/h	30 km/h
Package Price ** - RX1R-II camera - PPK with base - Ground station	DeltaQuad Pro #MAP	Wingtra WingtraOne - No PPK Base	AtmosUAV Marlyn - No PPK Base - No ground station
- Ground station - Rugged flightcase	€ 19.600	€ 29.500	€ 30.400

- \* The maximum wind conditions listed are those in which the vehicle can still operate safely, these are generally not conditions in which a mapping mission is feasible. Wingtra has released a video showing how their vehicle operated in high wind conditions that clearly show conditions unsuitable for mapping: <a href="https://youtu.be/aTCK1GOAB-U">https://youtu.be/aTCK1GOAB-U</a>
- \*\* The prices indicated are based on quotations from the manufacturer. To give a fair comparison we have requested exactly the same options on every model: The Sony RX1R-II, a PPK system with base station, a ground control station and a rugged flight case. Not all quotations included all components and the deviations are listed.