

# 03 TECHNICAL SPECIFICATIONS

TECHNICAL DATA	LOCKED <60 MINUTES	UNLOCKED 90+ MINUTES <sup>1</sup>
Max. Take-off Weight	5.5 kg (12.0 lbs)	5.5 kg (12.0 lbs)
Allowed C.G. from leading edge	85-91 mm	85-91 mm
Max. Flight Time	<60 min	90+ min <sup>1</sup>
Max. Range = Area	70 km = 500 ha	100 km = 700 ha
Maximum flight altitude (MSL)	4500 m (13123.4 ft) <sup>2</sup>	4500 m (13123.4 ft) <sup>2</sup>
Command and Control (C2) Range	5-7.5 km <sup>3</sup> (3.1-4.7 mi)	5-7.5 km <sup>3</sup> (3.1-4.7 mi)
C2 Latency	<60 ms	<60 ms
Optimal Cruise Speed	17-18 m/s (35 kn) <sup>4</sup>	17-18 m/s (35 kn) <sup>4</sup>
V <sub>NE</sub> (Velocity never exceed)	35 m/s	35 m/s
Wind Tolerance (ground)	up to 9 m/s (17.5 kn) <sup>5</sup>	up to 9 m/s (17.5 kn) <sup>5</sup>
Wind Tolerance (cruise)	12 m/s (23.3 kn)	12 m/s (23.3 kn)
Battery Capacity	12 Ah	12 Ah
Payload	max. 1000 g (2.2 lbs)	max. 1000 g (2.2 lbs)
Battery Weight	1.5 kg (3.3 lbs)	1.5 kg (3.3 lbs)
Maximum bank angle	43°	43°
Minimum turn radius	31.8 m	31.8 m
Maximum sink rate in aerodynamic flight	2 m/s	2 m/s
Maximum climb rate in aerodynamic flight	9 m/s (7 m/s) <sup>6</sup>	9 m/s (7 m/s) <sup>6</sup>
Maximum sink rate in hover flight	3 m/s	3 m/s
Maximum climb rate in hover flight	4 m/s (3.5 m/s) <sup>6</sup>	4 m/s (3.5 m/s) <sup>6</sup>

1 Subject to export regulation, may require export permission.

2 Please be aware that the flight time and max. wind tolerance are reduced with increasing flight altitude. Depending on the weather conditions; tested at 15° C (59° F). For further details read the user manual chapter 3.1.

3 Under optimal conditions.

4 Depending on payload configuration (see chapter 3.2).

5 Please be aware that the max. wind tolerance is reduced with increasing flight altitude.

6 With a Take-Off-Mass >5kg (Qube 240 LiDAR Payload)

TECHNICAL DATA	LOCKED <60 MINUTES	UNLOCKED 90+ MINUTES <sup>1</sup>
RC transmitter frequency	2.4 GHz	2.4 GHz
Telemetry link (QBase Modem) frequency	2.4 GHz	2.4 GHz
Telemetry link (QBase Modem) power	max. 100 mW <sup>7</sup>	+max. 100 mW <sup>7</sup>
Operating temperature range	-12 °C to 50 °C (10.4 °F to 122 °F) <sup>8</sup>	-12 °C to 50 °C (10.4 °F to 122 °F) <sup>8</sup>
Wingspan	2.394 m (7.85 ft)	2.394 m (7.85 ft)
Transport Case Dimension	1002x830x270 mm (39.4x32.7x10.6 inch)	1002x830x270 mm (39.4x32.7x10.6 inch)
Transport Case Weight (3 batteries)	22.3 kg (49.1 lbs)	22.3 kg (49.1 lbs)
Front Propeller Speed	12,000 rpm	12,000 rpm
Rear Propeller Speed	10,000 rpm	10,000 rpm

<sup>7</sup> Please follow the local regulations for the maximum allowed transmission power.

<sup>8</sup> For outside temperature < 10°(<50°F):

- Heat up the battery to 25°C (77°F) for at least 5 hours

For outside temperature < 0° (<32°F):

- Heat up the battery to 25°C (77°F) for at least 5 hours
- The flight time will be reduced to max. 70 minutes.