# Autel Robotics EVO pursuant to RPAS Safety Assurance for Canada Advanced Operations

Canadian Aviation Regulations and Standards, SOR/96-433 Part IX—Remotely Piloted Aircraft Systems

# General Requirements 901.78 (ii)

AIRCRAFT SPECIFICATIONS				
Weight	863 grams			
(Including Battery and Propellers)				
Maximum Take-off Weight	1000 grams (Do not fly the aircraft with any additional payload)			
Center of Gravity	125.5 mm from the nose of the aircraft towards the tail (centered)			
Hover Precision	GPS + Ultrasonic + IMU: Horizontal ±1.5m, Vertical ±0.2m			
	Vision + IMU: Horizontal ±0.1m, Vertical ±0.1m			
Maximum Yaw Rate	200 dps			
Maximum Inclination Angle	35 degrees			
Maximum Ascent/Descent Speed	Ascent: 11 MPH, 18 KPH, 5 M/S			
	Descent: 7 MPH, 11 KPH, 3 M/S			
Maximum Horizontal Speed	45 MPH, 72 KPH, 20 M/S			
(Ludicrous Mode)				
Diagonal Wheelbase	13.3 inches, 338 mm			
Propeller Size	8.3 inches, 211 mm			
Video Link Frequency	2.4 GHz – 2.4835 GHz			
Receiver Frequency	2.4 GHz – 2.4835 GHz			
Flight Modes	GPS Mode, ATTI Mode			
Operating Environment	32° F – 104° F			
Temperature	0° C – 40° C			
Storage Temperature	14° F – 104° F			
	-10° C – 40° C			

## General Requirements 901.78 (iii)

FLIGHT MODE	MIN ALTITUDE	MAX ALTITUDE	MINIMUM SAFE	MAXIMUM SAFE VELOCITY
			VELOCITY	
Novice	~6 ft (2m)	~98ft AGL	0 MPH, KPH, M/S	11 MPH (18 KPH, 5 M/S)
		(30m)		
Precision	~6 ft (2m)	~16,400 AMSL	0 MPH, KPH, M/S	8.9 MPH (14.4 KPH, 4 M/S)
Standard	~6 ft (2m)	~16,400 AMSL	0 MPH, KPH, M/S	22 MPH (36 KPH, 10 M/S)
Ludicrous	>100 ft (30m) above	~16,400 AMSL	0 MPH, KPH, M/S	22 MPH (36 KPH, 10 M/S)
	any obstacle or			
	object			

## General Requirements 901.78 (iv)

Autel Robotics EVO Wind Rating based on the Beaufort Wind Scale \*There is no IP Rating for the Autel Robotics EVO

Force	Wind	WMO	Appearance of Wind Effects on	Appearance of Wind Effects on
	(Knots)	Classification	the Water	Land
5	17-21	Fresh Breeze	Moderate waves 4-8 ft taking	Small trees and leaf begin to sway
			longer form, many whitecaps,	
			some spray	

## **Important links to Canadian Drone Regulations:**

## **Canadian Aviation Regulations (SOR/96-433)**

https://www.tc.gc.ca/en/transport-canada/corporate/acts-regulations/regulations/sor-96-433.html

#### **Drone Safety**

https://www.tc.gc.ca/en/services/aviation/drone-safety.html

## **Find Your Category of Drone Operation**

https://www.tc.gc.ca/en/services/aviation/drone-safety/find-category-drone-operation.html#advanced

## **Choosing the Right Drone/RPAS Safety Assurance**

https://www.tc.gc.ca/en/services/aviation/drone-safety/choosing-right-drone.html

## **Getting a Drone Pilot Certificate**

https://www.tc.gc.ca/en/services/aviation/drone-safety/get-drone-pilot-certificate.html