



RQ-35 HEIDRUN

TECHNICAL SPECIFICATIONS

The RQ-35 Heidrun is a battle proven, fixed wing, mini UAS for low-altitude video surveillance and reconnaissance missions. It is designed for operations in complex environments and with high mobility, rapid and easy launch & recovery in mind. Reaching >30 km of live video feed, it is ideal for collecting immediate situational awareness from any mission critical area without exposing the operator to any danger.

DIMENSIONS	L x W x D	WEIGHT
UAV - Ready for Take-Off	1070 mm x 1650 mm x 170 mm	2.6 kg
UAV Battery	140 mm x 70 mm x 40 mm	0.6 kg
Complete UAS in transport case	1121 mm x 409 mm x 355 mm	24,7 kg (excl. batteries)
Complete UAS in backpack (mobile)	1120 mm x 440 mm x 300 mm	15,7 kg (excl. batteries)

PERFORMANCE

Max flight time	Up to 100 min (>135 min. UKR pre-release batt.)	
Max wind tolerance	12 m/s	23 kts
Cruise speed (air speed)	16 m/s	31 kts
Service ceiling	5,200 m ASL	17,000 ft ASL
Maximum landing altitude	3,000 m ASL	9,800 ft ASL
Minimum / Maximum operating temp.	-20 °C	45 °C
Charger power supply	100-240 V AC	12 V DC
RQ-35 battery	14.8 V	10 Ah
Average landing area needed	12.5m radius	Weather dependent
Launch/land method	Hand launched	Deep Stall landing
GNSS-denied operation	Low audible and visual signature	
Fail Safes	Loss of Telemetry Link Low Battery Loss of GNSS data	

GROUND SYSTEM OPERATIONS

Rugged tablet (Windows based)	Performance depends on chosen model	
User Interface based on user-driven development	Sky-Watch Drone Manager (SDM)	Single tablet operation
	Sky-Watch Camera Controller (SCC)	Dual tablet operation



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TELEMETRY & VIDEO

Radio frequency	2.2 to 2.5 GHz	10MHz Channel Bandwidth
Transmission power	Normal mode 0,1 Watt	Up to 4,0 Watt with Autonomous boost mode
Spectrum Dominance	Autonomous RF channel selection RX and TX beamforming	Auto change of encryption 4 encryption keys
Antenna type	UAV: Dipole antennas GS: Dipole combined with directional patch antenna	
Encryption	Up to AES-GCM 256 ECDH-KAS (FIPS 140-2) depending on EUS	
Transmission range	Up to 30km	Highly dependent on actual environment

PAYLOAD

	TRIPLE LENS CAMERA		2 + 1 LENS CAMERA	
Payload platform	Extractable gimbal mount		Extractable gimbal mount	
Gimbal	2-axis stabilized gimbal		2-axis stabilized gimbal	
Visible camera (EO)	Resolution: 1280x720	Visible 400-700 nm	Resolution: 1280 x 720	Visible 400-700 nm
	HFOV: 60° WFOV – 1.5°	Zoom: x40 + x2 digital (x80)	HFOV: 60° WFOV – 3° - 1.5°	Zoom: x20 + x2 digital (x40)
	0.75° DFOV		DFOV	
Thermal camera (IR)			Resolution: 640 x 480	LWIR uncooled (8-14µm)
			HFOV: 32° W.FOV – 8°	Zoom: x4 digital
Extracted range of rotation	+/- 155° azimuth	(0 = UAV body heading)	+/- 166° azimuth	(0 = UAV body heading)
	-70° to +10° pitch	(0 = UAV water line)	-70° to +10° pitch	(0 = UAV water line)
Retracted range of rotation	Fixed 0° azimuth	(0 = UAV body heading)	Fixed 0° azimuth	(0 = UAV body heading)
	-36° to -90° pitch	(0 = UAV water line)	-31° to -90° pitch	(0 = UAV water line)

