



TOPOGRAPHY

FALCON MK3S TOPO

Integration with AI based post-processing software

Persistent area surveillance and topographic mapping with high-speed photo capture and autonomous operation.

Flight time | Range
30 MIN | **5 KM**

Payload(s):
FIXED FOCAL LENGTH, HIGH RESOLUTION, GLOBAL SHUTTER "EO-MAP"

KEY FEATURES:

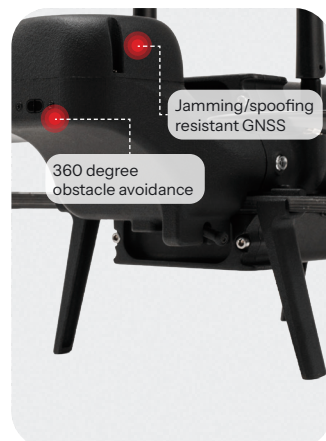
1

HIGH-SPEED PHOTO CAPTURE.



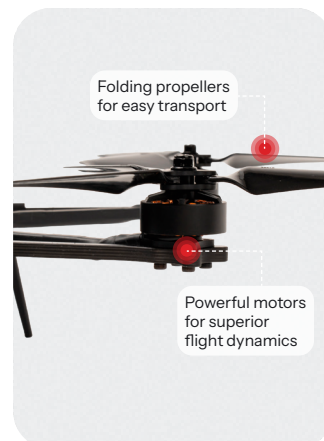
2

AUTONOMOUS OPERATION.



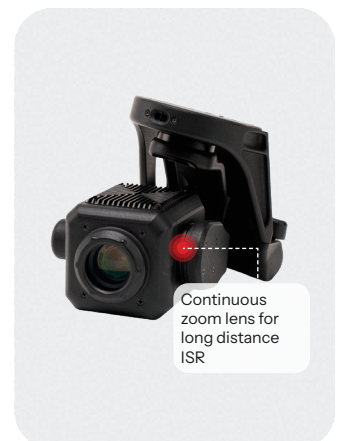
3

AI-ASSISTED OBJECT DETECTION POST-PROCESS.



4

OPTIONAL EO-ZOOM



MONOPULSE FALCON MK3S TECHNICAL SPECIFICATION

PLATFORM	
Type	Electric quadcopter with 8-inch propellers
Construction	Modular with user-replaceable main parts
Autopilot	PX4 with Monopulse proprietary extensions
GNSS system	Triple band (L1/L2/L5) GPS/Galileo/GLONASS/BeiDou. SBAS and RTK supported
GNSS safety	Jamming and Spoofing Indicators. Supports GNSS-denied operation (Optical Flow)
Autonomy	Supports fully autonomous operation based on the waypoint missions with and without the radio link to the base station
Failsafe	Programmable actions in case of datalink or GNSS loss and battery state
Datalink	2.4 GHz / 5.0-5.8 GHz encrypted (AES256)
Collision detection	360° and top/bottom obstacle sensors
Battery	Dual 6-cell Li-Ion. 2x4800 mAh
Size	UAV: 364 mm x 283 mm x 142 mm UAV with 8" propellers and payload: 530 mm x 426 mm x 142 mm
Weight	Sub 2.5 kg with all payload options
Flight time	≥30 minutes (weather conditions dependent)
Environmental rating	IP53, -20 °C to +40 °C
Flight Range	<5 km (Optional) External Antenna <10 km
PAYLOAD ¹	
Type	3-Axis mechanically stabilized gimbal with Global Shutter EO sensor
Operating Mode	Photo and Video
Sensors	Global Shutter EO sensor: Type 1/11 (4128 x 3008), 31.3° HFoV, fixed f/2.8
Transmission resolution	720p/1080p video downlink Full resolution photo downlink
Storage resolution	1080p/4K video storage on MicroSD card Full resolution photo storage
Multimedia compression	Photo: JPEG; Video h.264 or h.265 (MP4)
Media storage	Onboard MicroSD memory card
GROUND CONTROL STATION	
Type	Android 10-based hand-held controller
Software	UAV control using Monopulse UavMap. Supports 3rd party Android apps.
RF signal strength	Up to 28dBm (2.4G), up to 25 dBm (5.8G)
Display	7-inch LCD touch screen. 1920x1080 px, 1500 cd/m2 brightness, 40'000:1 contrast
Wired connectivity	Ethernet, HDMI, USB
Wireless connectivity	Wi-Fi; (2G/3G/4G/5G optional)
Battery time	4800 mAh battery – 4 hours Unlimited operation using hot-swappable batteries
Size and Weight	1.5 kg, 260mm x 160mm x 60mm (antennas folded in)
Environmental rating	-20 °C to +30 °C, IP55, Drop test according to MIL-STD-810
MISC	
Tool set	Includes all required hand tools and a single set of spares
Transport case	Hard-plastic flight case (Optional) Tactical Backpack
Charger	Dual battery charger. Power input: AC (230V)/DC(12/24V)

Payload¹ are user-replaceable and compatible across the Monopulse Falcon UAV range.