



FORWARD OBSERVER

FALCON MK3S FO

Integration with combat management systems

Artillery target spotting, fire control, and post-battle damage assessment with daylight/thermal camera and long-distance Laser Range Finder.

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

Payload(s):
TRIPLE CAM, LASER RANGE FINDER

KEY FEATURES:

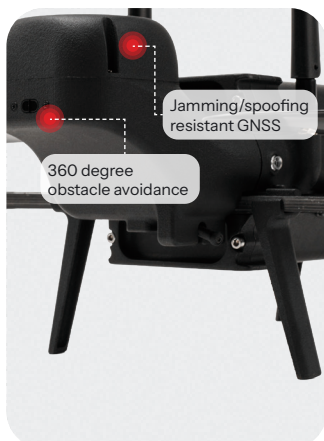
1

NATO STANDARDS-COMPLIANT LASER RANGE FINDER



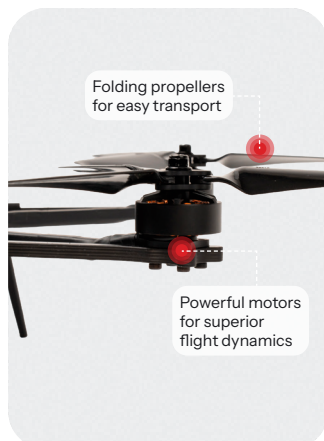
2

INTEGRATION WITH C2 SYSTEMS.



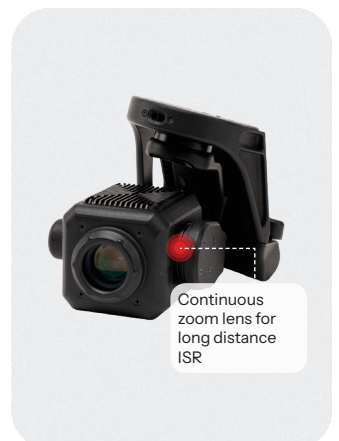
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DAY AND NIGHT OPERATION.



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 an integrated EO and LWIR cameras
Operating Mode	Photo and Video
Sensors	EO wide sensor: Type 1/16 (3552 x 3556), 92° HFoV EO tele sensor: Type 1/16 (3552 x 3556), 16° HFoV LWIR sensor: FLIR Boson+ 640x512 Shutterless (Radiometric option available) Laser Range Finder: Up to 4.5km, Up to 1.85km (NATO std. target), λ=1500nm, Eye-safe
Transmission resolution	720p/1080p video downlink Full resolution photo downlink
Storage	1080p/4K video storage on MicroSD card
resolution	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.