

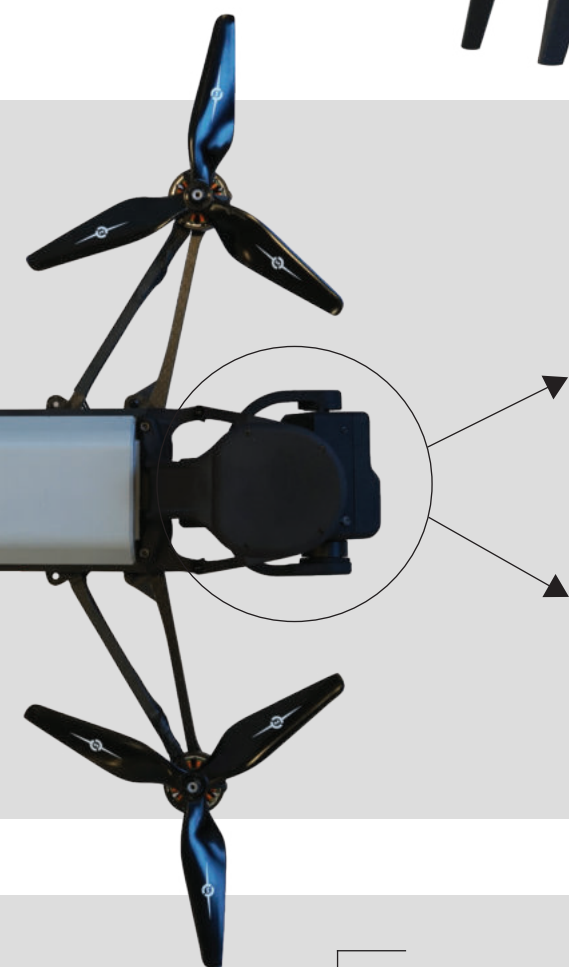
Falcon MK3

Configurations

 **MONOPULSE**



PAYLOAD



10x Optical Zoom | 5MP

4x Optical Zoom | 12MP (25Q2)



12MP EO + 320/640 LWIR

Optional 1.5km LRF (25Q1)

RF & NAV

RF Power Amplifier for Long Range Missions
Non-standard RF Frequency options



Dual Band GNSS Receiver

Triple Band GNSS Receiver
GNSS-denied Navigation (25Q2)

MONOPULSE FALCON MK3 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	Multiband GPS/Galileo/GLONASS/Baidu. SBAS and RTK supported
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 / 5.8 GHz encrypted (AES256).
Battery	Dual 6-cell Li-Ion. 2x4800 mAh
Size	UAV: 364mm x 283mm x 142mm UAV With 8" propellers and payload: 530mm x 426mm x 142mm
Weight	Sub 2.5 kg with all payload options
Flight time	~30 minutes (weather conditions dependent)
Environmental	-20 °C to +30 °C
PAYLOAD ¹	
Type	3-Axis mechanically stabilized gimbal with an integrated EO and LWIR cameras payload.
Operating Mode	Photo and Video
Sensors	EO sensor: Sony IMX676 (3552 x 3556, ~10.5 MP usable). LWIR sensor: FLIR Boson+ 640 x 512
Transmission resolution	720p/1080p video downlink. Full resolution photo downlink.
Storage resolution	1080p video storage on MicroSD card. Full resolution photo storage.
Video compression	h.264 or h.265
Media storage	Onboard MicroSD memory card
GROUND CONTROL STATION	
Type	Android-based hand-held controller
Software	UAV control using Monopulse UavMap. Supports 3 ^d party Android apps.
RF signal strength	Up to 28dBm (2.4G), up to 25 dBm (5.8G).
Display	5.5-inch LCD touch screen. 1920x1080 px, 1000 cd/m2 brightness
Wired connectivity	Ethernet, HDMI
Wireless connectivity	Wi-Fi and 2G/3G/4G using onboard SIM slot.
Battery time	Up to 6 hours depending on usage.
Size and Weight	1 kg, 235mm x 155mm x 70mm (antennas folded in)
Environment	-20 °C to +30 °C
IP rating	IP53
MISC	
Tool set	Includes all required hand tools and a single set of spares
Transport case	Hard-plastic flight case
Charger	Dual-battery charger. Power input: AC (230V)/DC(12/24V)

¹ Payloads are user replaceable. Combined EO/LWIR+LRF and EO with motorized zoom (and optional LRF) will be qualified in 2025H1.