



DATASHEET

Aiolit S1



AIROLIT S1

Airolit S1 is a Swedish made UAV, especially developed for ISR and as a Flexible Payload Carrier operating in all weather conditions.

The S1 offers a wide range of high-performance sensors and cameras, including up to 80x zoom, thermal imaging and object tracking.

Custom sensors can also be integrated with Airolit S1 and with its flexible payload-system it is easy to switch between payloads.

KEY FEATURES

- + Flight time 75min
- + Flexible payload system
- + Payload capacity 3kg
- + All weather operations
- + Tether station compatible

PAYLOAD

Airolit S1 offers a range of standard payloads but is also designed for easy integration of custom payloads.

- + ISR cameras
- + Inspection cameras
- + Cassette for laying optic fiber
- + Loudspeaker
- + Training & Simulation Payload
- + Custom payload up to 3 kg

SPECIFICATION	
Type	Multicopter (Quadcopter)
Unfolded Size	L530 x W530 x H175mm
Folded Size	L300 x W300 x H175mm
Number of Motors	4pcs, 450kV
Weight (w/o battery)	1.5kg
Maximum Take-off Weight (MTOW)	6.4kg

FLIGHT SYSTEM	
Flight Controller	PX4
Open Source	Yes
Automatic Positioning (GNSS/GPS)	GPS/GLONASS/BeiDou/Galileo
Navigation light	Yes
Remote ID	Optional
RTK	Ready
Redundancy	3xIMU, 3xMag, Barometer
Companion Computer	Yes, CM4

BATTERY	
Type	External, Solid State Li-ion
Capacity	16Ah or 30Ah
Voltage	22,2V
Energy	355Wh or 666Wh
Weight	1.6kg or 2.6kg

GCS & RADIO	
Option 1	Herelink 1.1
Display	5,5"
Video Quality	720p / 1080p @ 30fps
Connection	USB, Bluetooth, WiFi Hotspot
Operation Frequency	2,4GHz
Range Control	≤15km
Range Video	≤10km
Encryption	AES-128-CTR
Option 2	UXV SRoC
Display	7"
Video Quality	720p / 1080p @ 30fps
Connection	USB, Bluetooth, WiFi Hotspot
Operation Frequency	2,4GHz (custom options available)
Range Control	≤10km w default antennas
Range Video	≤7km w default antennas
Encryption	AES-128-CTR, AES-256-CTR

NAVIGATIONAL FEATURES	
Flight modes	Position, Altitude, Stabilize, etc
Missions	Yes, advanced mission planner
Safety features	Warning, Return-to-home, emergency landing etc

PAYLOAD	
Mounting	Under, Top
Max Weight	3kg (16Ah) / 2kg (30Ah)

SENSOR SUPPORT	
FPV Camera	Sony Starvis IMX462 (Default)
Flir Hadron 640R	Option
NextVision DragonEye2	Option
NextVision NightHawk2-UZ	Option
NextVision X80	Option
Sony ILX-LR1	Option
Workswell Wiris Enterprise	Option
Custom sensors	Upon request (i.e. Lidar, Multispectral Cameras etc)

FLIGHT TIME	
w/o Payload (30Ah battery)	75min
w/o Payload (16Ah battery)	60min

OPERATIONAL PERFORMANCE	
Max Speed	28m/s
Max Ascending/Decending Speed	8m/s, 4m/s
Max Wind Speed	25m/s
Temperature range	-20°C to +50°C
Operational Ceiling	4000m
Weather Resistance (IP)	IP55
Deployment time	Under 2 minutes

TRANSPORT CASE (OPTIONAL)	
Size	62.5 × 50 × 36.6 cm

ACCESSORIES	
Extra battery	Option
Extra propellers	Option
RTK Base station	Option
Leg extension	Option
Loudspeaker	Option

OTHER	
Warranty	1 year
Compliance	CE



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