

Atlas MICRO

Compact reconnaissance UAV

A sub-250 gram UAV with high resolution optical and thermal cameras, designed to be able to launch from hand, and fly in a GPS-denied environment.

AtlasMICRO is the most compact UAV in the market that is equipped with both a high resolution VGA thermal imaging camera as well as 64MPx day/low-light camera. These features, along with wide-spectrum jamming-resistant radio, 3-axis stabilized gimbal, full autonomous flight capability in GNSS-denied environment, microwave altimeter and obstacle avoidance system, and 35 minute flight time with rapid recharge, makes AtlasMICRO an excellent companion for both military as well as industrial customers.

Lightweight dual VGA thermal and 8K optical imaging

A full 640p high resolution radiometric camera for automated inspection, search and rescue and frontline reconnaissance.



Compact, easily foldable frame design

AtlasMICRO is designed to be pocketable and durable. Precision-machined foldable arm joints ensures a rigid folding operation.



Optical flow for flying in GPS-denied environment

AtlasMICRO uses a sophisticated 3D triangulation algorithm to improve the tracking precision, thus reducing the location deviation to a minimum.



Myriad of flight assist sensors and features

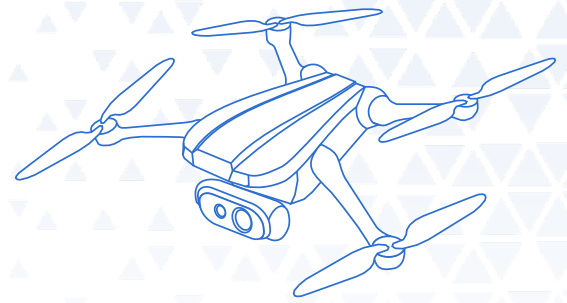
Equipped with wide band radio, microwave altimeter, obstacle avoidance lidar, high-frequency GNSS receiver, AtlasMICRO is both sophisticated and easy to fly.





Atlas MICRO UAV

Technical reference datasheet



PHYSICAL CHARACTERISTICS

Dimensions, folded (w x d x h)	104 x 164 x 58 mm
Dimensions, unfolded (w x d x h)	247 x 191 x 75 mm
Weight	249 grams
Enclosure	Impact resistant PC-ABS, UL94V-0
Ingress protection	IP44, weather resistant

OPERATIONAL ENVIRONMENT

Operating temperature	-20°C to +55°C
Relative humidity	5 ~ 95%, non-condensing

IMAGING PAYLOAD

Still image resolution	64K (9248 x 6944)
Daytime/low-light camera	4K (3840 x 2160) at 60fps
Thermal camera	VGA (640 x 512) at 50fps
Gimbal	3-axis stabilized, with hall effect sensors

MAINBOARD

Embedded flight controller	Atlas FCM
Onboard video transcoding	Yes, hardware accelerated
Onboard object tracking	Yes, AI image co-processor
Supported codecs	H.264 / H.265
Onboard storage	MicroSDXC up to 2TB
Secure storage	Yes, AES256 encryption

BATTERY AND POWER

Battery module	Atlas Micro2S Battery pack
Capacity	3600mAh
Battery management system	Yes, Smart battery
Charger	USB-C PD compatible, 145W
Charge time	55min

PROPULSION

Motor configuration	Quad-rotor
Flight time	35 min
Max speed	17m/s (61km/h)
Wind speed resistance	10m/s
Max service ceiling (above sea level)	3500m
Hand/vehicle launch	Yes, from up to 20km/h

ONBOARD SENSORS

GNSS	U-blox 10 (GPS + GLONASS + Galileo)
Obstacle avoidance	Forward-facing ToF lidar
No-GPS positioning	Daytime optical flow sensor
Altitude radar	Microwave altimeter
Barometer	High-precision, self calibrating
Positional sensors	Compass, Gyro, IMU, Thermometer

COMMUNICATIONS

Primary radio	Atlas ATR-200 @ 1W
AtlasMESH Compatible	Yes
Standard (civilian) freq. range	2.4 - 2.4835 Ghz
Full extended freq. range	2.2 - 2.7 Ghz
Frequency hopping	Yes, including smart scan
Onboard antenna	3dB
Radio range	>8.5 km
Certification	CE, FCC

ACCESSORIES

Additional charger	Atlas Smart charger (Gen 2)
Travel case	Compact hard case
Carry case	Hip/arm strapped quick-release holster
Propeller kit	Atlas MP blades