



DRONE FOR EVERYONE

Argosdyne. Product Catalog

Drone Technology Innovates for a Better Future



## **SARGOSDYNE**

### drone for everyone

Argosdyne, composed of developers and drone experts with over 10 years of IT experience, is a challenging company that constantly explores and tests the latest technologies in the field of unmanned vehicles.

We define drones as a mobility system that offers new alternatives in the industrial field, not simply as a flying and shooting device, but as a robot that performs a mission in a three-dimensional space including the sky.

With the technology accumulated as a drone automatic operation platform, Argosdyne will build a mobility platform that can be applied to all fields of the unmanned mobile industry including drones.

Argosdyne, dreaming of becoming a global unmanned mobile mobility platform company, takes a step full of hope to build and provide services for all automation platforms in the sky, on the water, and on the ground.

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## **AQUILA-2**

### Drone for everyone

Designed with user convenience in mind, it delivers intuitive systems and easily accessible services.



Waterproof IP53



**Dual GPSs** 



Max. Flight Time: 67Minutes



Up to 1.5 kg Payload





- Operable with Drone Stations
- Multi-Player in all areas
- Max. Flgiht Time: 67Minutes (without payload)



#### **Features**

- Designed for Versatility Across Multiple Sectors
- Support various payloads such as EO/IR, 3D LiDAR etc,.
- PC based GCS or Smart Controller
- Support Precision Landing Module for Drone Station(optional)
- Communication: 4/5G LTE, MANET



## **AQUILA-2**

### The All-Around Player in Drone Technology

#### 1. Multi-Purpose Drone, AQUILA-2

The Aquila-2 drone by ARGOSDYNE is a versatile and customizable solution for construction site, Drone First Response, Law Enforcement, etc,.

It delivers stable flight performance and extended flight time. Most components, including the software, are developed in-house, enablint fully customized configurations.

It features a configurable camera, a dedicated remote controller, and a built-in speaker system for versatile mission capabilities.

The camera can be easily swapped using a quick-release system, supporting various types ranging from Full HD to 4K EO/IR cameras.

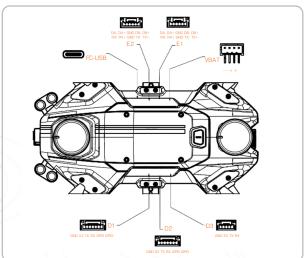
By maximizing power efficiency, the Aquila-2 achieves longer flight times on minimal energy consumption.

Its dual GPS modules ensure precise positioning even in challenging electromagnetic environments—without the need for an RTK system.

Designed for autonomous and continuous missions, it integrates seamlessly with the Drone Station (Docker-based system). Its extended flight time, and payload versatility make it ideal for long-duration operations and integration with various communication platforms.

External I/O ports allow users to connect and operate their own devices directly from the Aquila-2 platform.







Size (WxLxH)	495.3 × 455.2 x 286.4 mm	Num of Motors	4
D T		Diagonal Size	600mm
Drone Type	Quadcopter	Weight (Max Payload)	1.5kg
Battery Capacity(2ty	·	Max. Takeoff Weight	4Kç
Weight with Battery	2.5kg	Max. Flight Speed	45km/h
Max. Flight Altitude  Max. Wind	1.5Km ————————————————————————————————————	Max.FlightTime (without payload)	> 67minutes
Resistance		Max. Rotation Speed	60°/s
Max.Takeoff/Land S <sub>l</sub>	peed 6-10m/s (Configurable)		
Operation	-10°C~50°C	IP Level	IP53
Temperature		Position Accuracy	± 20cm
GNSS System	Dual GPS-GPS, GLONASS, Galileo, BeiDou	Etc.,	Obstacle Avoidance (optional)
Failsafe	Battery Failsafe, Signal Loss Failsafe		

## AQUILA-2+

## Drone for everyone

Designed with user convenience in mind, it delivers intuitive systems and easily accessible services.



Waterproof IP53



**Dual GPSs** 



Max. Flight Time: 67Minutes



Up to 1.5 kg Payload



Built-in 5G Router



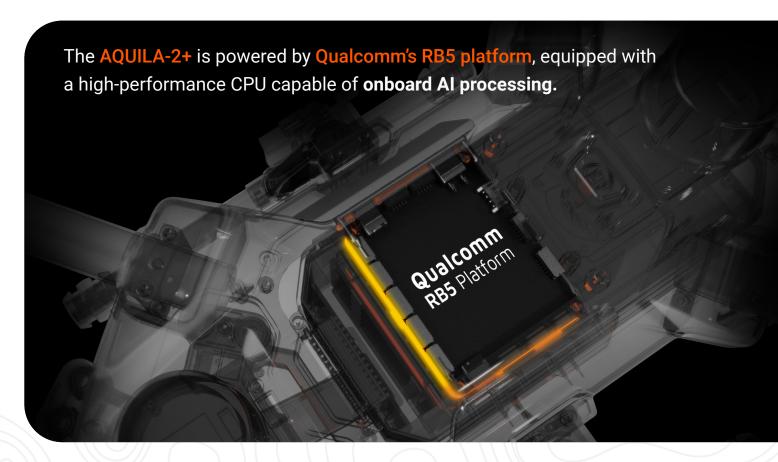
Al data processing



- 4G/5G LTE
- Powered by a high-performance CPU based on the Qualcomm RB5 platform.
- Al Edge Device

#### **Features**

- Multi-purpose Drone for Day & Night Use
- Multi-tasking Capability Through High-Performance CPU
- Support 4G/5G LTE
- Support various payloads such as EO/IR, 3D LiDAR etc..
- · PC based GCS or Smart Controller
- Support Precision Landing Module for Drone Station(optional)



## **AQUILA-2+**

## The **All-Around Player** in Drone Technology with **High Performance** CPU

### 1. Multi-Purpose Drone with 4/5G LTE inside AQUILA-2+

ARGOSDYNE's Aquila-2+ is a powerful and adaptable drone solution, designed to meet the needs of construction, mapping, and a wide range of industrial and commercial missions.

Powered by Qualcomm's RB5 platform and built-in 4/5G LTE connectivity, the Aquila-2+ brings edge computing to the skies—enabling real-time Al processing directly on the drone, without the need for external servers.

Custom-designed components and proprietary software allow the drone to be configured for a wide range of use cases.

With a quick-release system, the Aquila-2+ supports easy camera swaps and accommodates a variety of payloads, including Full HD to 4K EO/IR options—ensuring optimal flexibility for mission-specific needs.

Engineered for endurance, the Aquila-2+ leverages high thrust and energy-efficient design to maximize flight time.

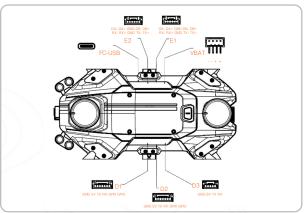
Dual GPS modules with multi-satellite support provide robust positioning accuracy, even in challenging electromagnetic environments.

Designed for autonomous and continuous missions, it integrates seamlessly with the Drone Station (Docker-based system). Its extended flight time, and payload versatility make it ideal for long-duration operations and integration with various communication platforms.

With extended flight endurance, a replaceable battery system, and versatile payload support, the Aquila-2+ is engineered for long-duration missions and seamless adaptation across various operational scenarios.

Compatible with 4G/5G, LTE, Wi-Fi, and MANET, it offers flexible connectivity across diverse communication environments. compatibility with diverse communication systems.







Size (WxLxH)	195.3 × 455.2 x 286.4mm	Num of Motors	4
D T	Over de auton	Diagonal Size	600mm
Drone Type	Quadcopter	Weight (Max Payload)	1.5kg
Battery Capacity(2ty	oe) 10,000 / 12,000mAh	Max. Takeoff	4Kg
Weight with Battery	2.5kg	Max. Flight Speed	45km/h
Max. Flight Altitude  Max. Wind	1.5Km 15m/s	Max.FlightTime (without payload)	> 67minutes
Resistance		Max. Rotation Speed	60°/s
Max. Take off /Land Speed	6-10m/s (Configurable)		ID50
Operation	-10°C~50°C	IP Level	IP53
Temperature		Position Accuracy	± 20cm
GNSS System	Dual GPS-GPS, GLONASS, Galileo, BeiDou	Etc.,	Obstacle Avoidance (optional)
Failsafe	Battery Failsafe, Signal Loss Failsafe		

## AQUILA-3F

## Drone for everyone

Designed with user convenience in mind, it delivers intuitive systems and easily accessible services.



Waterproof IP53



**Dual GPSs** 



Max. Flight Time: 76Minutes



Up to 3 kg Payload





- Operable with Drone Stations
- Multi-Player in all areas
- Folding Arm

#### **Features**

- Multi-purpose drone for day and night operations
- Support various payloads such as EO/IR, 3D
- PC based GCS or Smart Controller
- Support Precision Landing Module for Drone Station(optional)
- Communication: 4/5G LTE, MANET



## **AQUILA-3F**

## The All-Around Player in Drone Technology with Long Flight Time

#### 1. A Versatile UAV Platform with Long Flight Endurance, AQUILA-3F

ARGOSDYNE's Aquila-3F is a highly adaptable drone platform, ideal for construction, public safety, and mapping missions. With reliable flight performance, long endurance, and a foldable design, it combines power with portability.

Custom-designed components and proprietary software allow the drone to be configured for a wide range of use cases.

With a quick-release system and support for Full HD to 4K EO/IR cameras, the Aquila-3F offers flexible payload integration tailored to diverse operational needs.

Engineered for endurance, the Aquila-2+ leverages high thrust and energy-efficient design to maximize flight time.

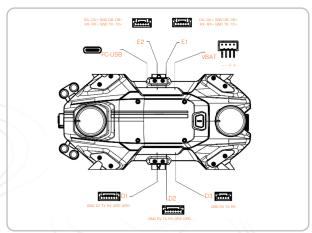
Dual GPS modules with multi-satellite support provide robust positioning accuracy, even in challenging electromagnetic environments.

Designed for autonomous and continuous missions, it integrates seamlessly with the Drone Station (Docker-based system). Its extended flight time, and payload versatility make it ideal for long-duration operations and integration with various communication platforms.

With long flight endurance, a replaceable battery system, and versatile payload compatibility, the Aquila-3F is perfectly suited for extended operations across diverse mission profiles.

Compatible with 4G/5G, LTE, Wi-Fi, and MANET, it offers flexible connectivity across diverse communication environments.







Aquila-3F Technical S	респісаціон		
Size (WxLxH) 583	3.58 × 582.42 x 325mm	Num of Motors	4
Duana Tima	Overdeenten	Diagonal Size	780mm
Drone Type	Quadcopter	Weight (Max Payload)	3k <u>ı</u>
Battery Capacity(2type)	10,000 / 12,000mAh	Max. Takeoff Weight	5.85K
Weight with Battery	2.85kg	Max. Flight Speed	45km/l
Max. Flight Altitude  Max. Wind Resistance	1.5Km 15m/s	Max.FlightTime (without payload)	> 76minutes
Max. Takeoff/Land Speed	6-10m/s (Configurable)	Max. Rotation Speed	60°/
Operation	-10°C~50°C	IP Level	IP50
Temperature	10 0 00 0	Position Accuracy	± 20cn
GNSS System	Dual GPS-GPS, GLONASS, Galileo, BeiDou	Etc.,	Obstacle Avoidance (optional
-ailsafe	Battery Failsafe, Signal Loss Failsafe		

## **AVIATOR**

### **Smart Controller**

Available for the AQUILA series



Control Range: > 3Km



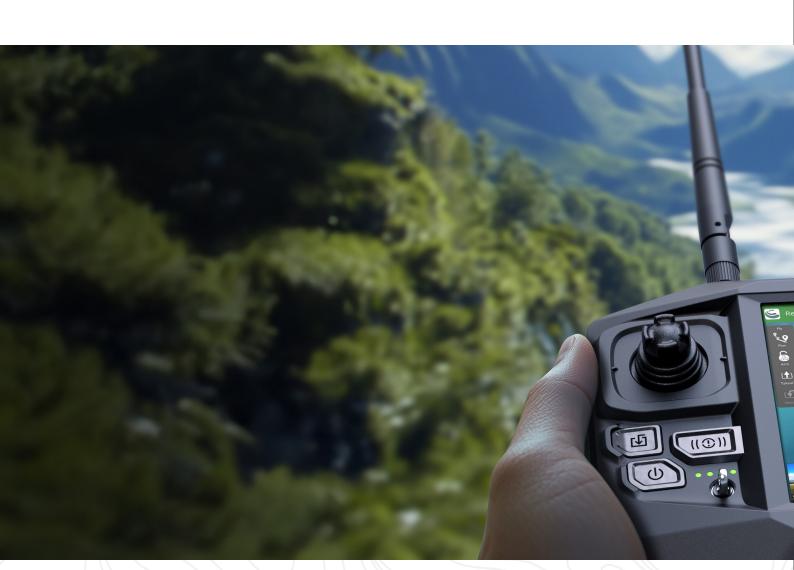
Max. Operation Time: > 4 Hours



Weight 1100g



7-inch, FHD screen



- Portable remote controller
- Supports 2.4GHz & 5.8GHz
- Operation time: Max. 4.5Hours

#### **Features**

- Smart control
- · Support Camera & Gimbal Control
- Real-Time Video Play
- Long Range ( > 3 Km ) (Depending on Country and Environ.)
- Support Wi-Fi connection
- Support Various Flight Controllers



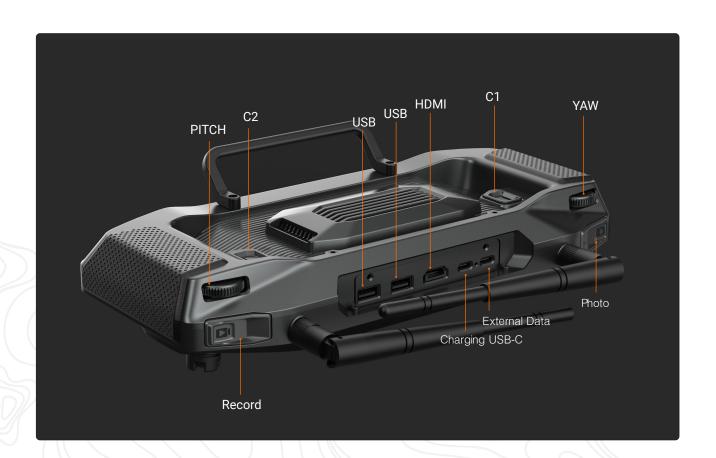
# **AVIATOR**Smart Controller

#### 1. Controller - AVIATOR

The AVIATOR controller enables drone operation within > 3 km\* visual line-of-sight (VLOS) range, leveraging OFDM communication for stable and long-range control.

This advanced communication system ensures responsive control and a stable connection, both at close range and over long distances.

AVIATOR is the perfect remote controller that guarantees complete control of the drone from anywhere.





AVIATOR Technical Specification	
Size (WxLxH)	280×150×60mm
Weight	1100g
Frequency	2.4000 - 2.4835 GHZ; 5.725-5.850 GHz
RF Power	10mW/MHz
Antenna	2T2R
Operating system	Android10
Operation Time	4.5 Hours
Communication Range	4km*, VLOS, Output Power = 27db
Display	7", 1080P, 1000nit
Output Ports	USBx2, HDMI x1, USB-C x2
Operation Temperature	0°C~40°C
Built-in battery	7.4V 10000mAh

<sup>\*</sup>It may vary depending on the terrain and features.

### Surveillance

## **CAMERA**

Available for the AQUILA series





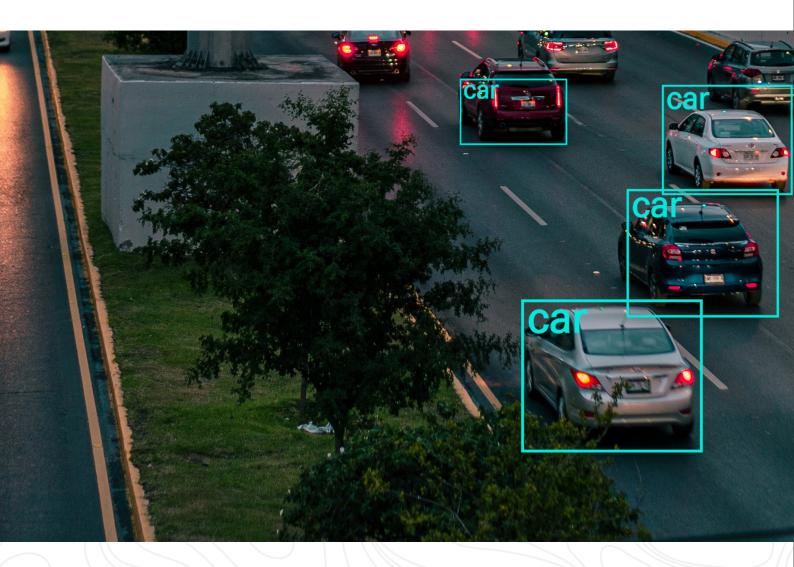
4K Image quality



x30 Zooming

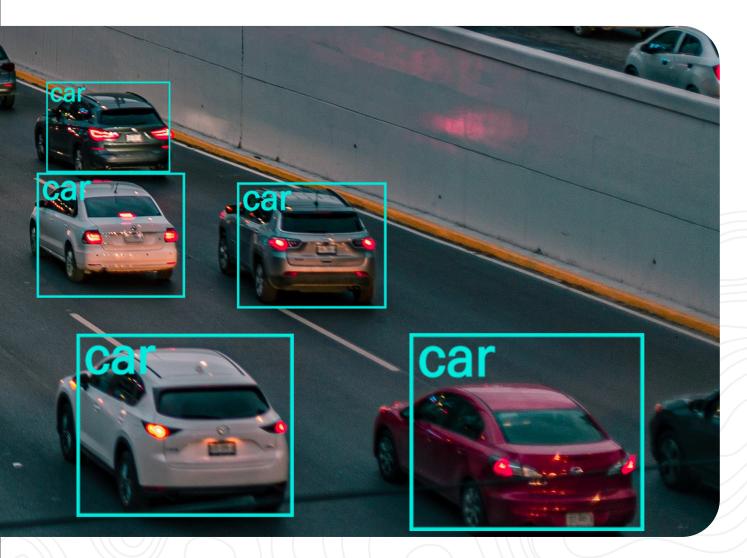


**NVIDIA** board



- EO Camera: 4K Video, x30 Zoom (x90 Hybrid Zoom)
- 3-Axis Gimbal
- IR: 640x512 30Hz

- High-Precision 6-Axis MEMS Motion Tracking ®IMU
- Range Finder: up to 1.2Km



## Surveillance

### Camera

#### **1. RHYTHM 3**

The Rhythm3 camera seamlessly synchronizes infrared and visible light images, delivering clear visuals along with radiometric data analysis capabilities.

With radiometric JPEG compatibility, it delivers high-quality thermal images and supports detailed analysis—ensuring enhanced situational awareness through advanced imaging technology.

The EO camera of the Rhythm3 is equipped with a SONY Exmor R CMOS sensor, delivering exceptional 4K resolution and x30 optical zoom for detailed visual capture.

Equipped with a built-in NVIDIA module, it enables advanced object detection, delivering precise and versatile performance across a range of operational scenarios.







RHYTHM 3 General Specification	
Size (WxLxH)	150x112x153mm
Weight	800g
IP rating	IP44
Camera Modules	EO: SONY Exmor, 4K, x30 IR: 640x512, 30Hz LRF: distance up to 1.2Km Al Image Detection
Gimbal control range	Pitch: 90° to +20° Pan: 360°
Operating Temperatur	re -10°C to 50°C
Power	11~25V

RHYTHM 3 Edge computing performance		
SOM	Nvidia Xavier NX 16G	
Al performance	21 TOPS (INT8)	
GPU	384-core NVIDIA VoltaTM GPU with 48 Tensor Cores	
GPU Max Freq	1100 MHz	
CPU	6-core NVIDIA Carmel ARM v8.2 64-bit CPU 6MB L2+4MB L3	
CPU Max Freq	2-core @ 1900MHz 4/6-core @ 1400Mhz	
Memory	8GB 128-bit LPDDR4x @1600 MHz 51.2GB/s	
Repository	16GB eMMC5.1	

Eo Camera	
Sensor	4K Exmor R CMOS Sensor SONY 1/2.5 CMOS 8.51 MP
Zooming	30 optical zooming, 90 Hybrid zooming without quality lose
Electronic shutter spe	eed 1 to 1/10000 sec.
Video resolution	3840 x 2160@30fps
Video format	mp4
Storage temperature/ Humidity	-20 to 60°C/20-95%

El Camera	
Lens	Focal length: 9.1 mm (equivalent:40mm) FOV 48°×38°, 1.31mrad, DFOV: 61°,F1.0
Type Uncooled	VOX Microbolometer(VOX)
Image quality	640*512
Video resolution	640*512@30Hz
Video format	mp4
Operating Temperature	-40°C~+80 (-20°C~60°C Radiometric)

### Mapping

## **CAMERA & 3D LIDAR**

Available for the AQUILA series



Reliable and stable flight



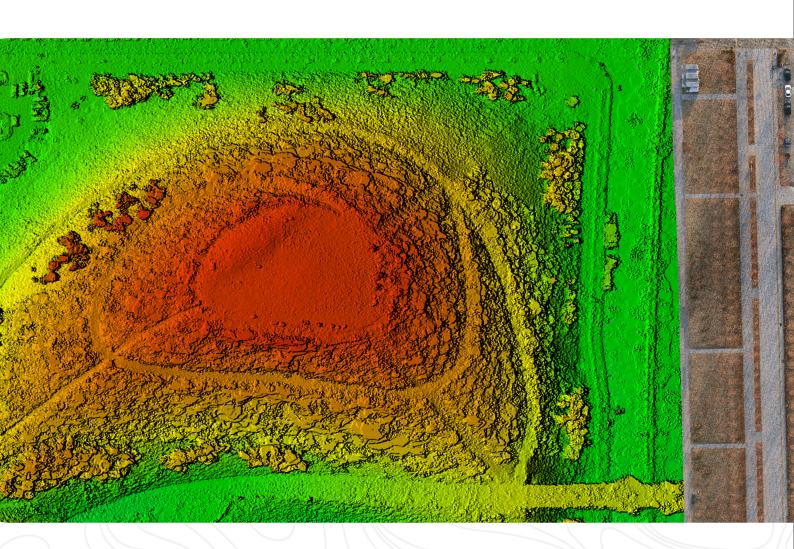
Optimized Precision with Specialized Lens Matching



**Safe Operating Range** 



**High-Resolution Images** 



- Sony IMX 455 full-frame 61MP
- 3.76µm pixel
- Mapping accuracy of 2cm

- Multi-LD low dispersion lens
- Multi-layer reinforced nano coating



# **Mapping**Camera



#### 1.6100X

SHARE's in-house imaging module, equipped with a state-of-the-art Sony IMX455 full-frame 61MP sensor and 3.76µm pixels, sets a new standard in aerial surveying and mapping.

Constructed with friction-reducing Kimoto material, the shutter ensures greater longevity. The integrated multi-LD (low-dispersion) lens enhances optical performance for sharper, clearer imagery.

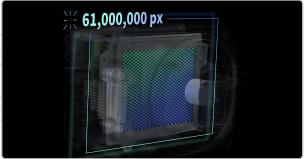
The lens is treated with a multi-layer reinforced nano-coating that effectively reduces reflected light, delivering consistent image quality and crystal-clear aerial footage.

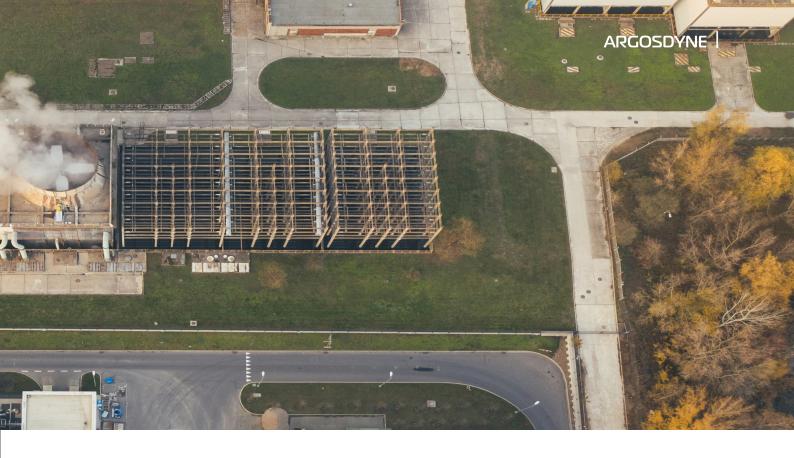
With TIMESYNC 2.0, precise microsecond synchronization across camera, gimbal, flight control, and RTK enables GCP-free workflows. Adaptive 1080p HD streaming further ensures stable, responsive flight control.

#### Share 6100X



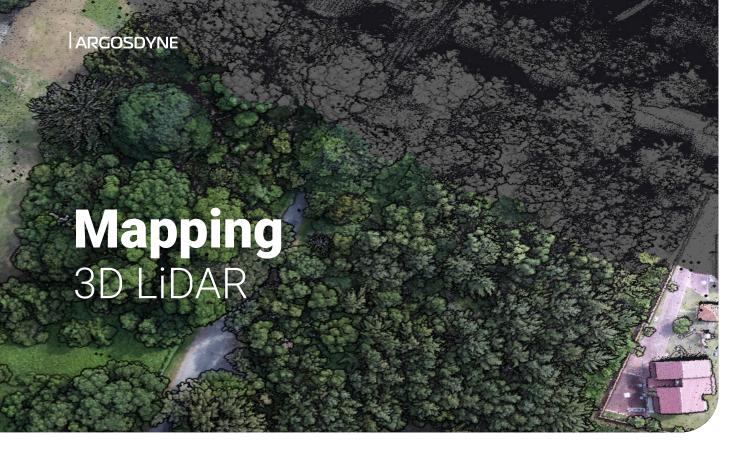






#### **Share 6100X Technical Specification**

Size (WxLxH)	128.5 x 181.5 × 153.3mm(gimbal include)
Weight	640g (gimbal include)
Image size	9552 × 6368 Pixel
Resolution	4K (3840×2160)
Pixels Size	9552 × 6368
Pixel Size	3.76µm
IP rating	IP53
Stabilization system	3-axis gimbal (pitch, roll, yaw)
Data capacity	512GB
Aperture	F5.6 fix
Operating temperature	-20°C~50°C
Storage temperature	-20°C~60°C
Operating humidity	≤ 95%
Lens	Standard 40mm Option 56mm
Power	DC 12-50V



#### 2. Yellowscan Surveyor Ultra OEM, Mapper+OEM

The YellowScan Ladar series offers an outstanding integrated LiDAR solution in terms of both price and performance, enabling precise data acquisition.

Combining lightweight design with high density, it ensures both lightness and accuracy.

Additionally, it provides easy operation and processing, making it accessible even to beginners.

**Surveyor Ultra OEM Tethering System** 

#### Surveyor Ultra OEM



 $0.754 \, kg$ 

		May data managatad	1000k mtg/ggg
Laser scanner	Hesai XT32M2X	Max. data generated	1920k pts/sec
Point density	34 pts/sqm @ 100 m AGL 18m/s	RGB Camera	8MP
Laser range	Up to 230 m 300 m	Precision	3cm
Laser wavelength	905 nm	Accuracy	2.5cm
Scanner field-of-view	360° x 40.3°	Power consumption	20W
GNSS inertial solution	SBG Quanta Micro	Size (WxLxH)	101×128×111 mm

Weight

120 m

Max. rec. flying height

#### Mapper+OEM

#### Version A



#### Version C



Mapper+OEM Tethering System	
Laser scanner	Livox AVIA
Point density	95 pts/sqm @100 m AGL 18 m/s
Laser range	Up to 230 n
Laser wavelength	905 nn
Scanner field-of-view	70.4° x 4.5
GNSS inertial solution	Applanix APX-1
Max. rec. flying height	100 r
Max. data generated	720k pts/se
RGB Camera	(VERSION-A): Optiona (VERSION-C): 8 MR
Precision	3.5cn
Accuracy	4cn
Power consumption	190
Size (WxLxH)	(VERSION-A): 144 x 66 x 93 mn (VERSION-C): 100 x 97 x 94 mn
Weight	(VERSION-A): 0.75 kg (VERSION-C): 0.73 kg

#### **AQUILA Comparsion**

Feature	AQUILA-2	AQUILA-3F
Drone Type	<ul> <li>Quadrotor UAVs</li> <li>Optimized for multi-purpose applications.</li> </ul>	<ul> <li>Quadrotor UAVs</li> <li>Optimized for multi-purpose applications.</li> </ul>
Size (mm)	• 495 x 455 x 287 (W x L x H)	• 584 x 583 x 325 (W x L x H)
Max. Weight of Payload	• 1.5Kg	• 3.0Kg
Companion Computer	<ul> <li>Embedded 32-bit MICOM         Designed for lightweight control and stability.     </li> </ul>	<ul> <li>Embedded 32-bit MICOM         Designed for lightweight control and stability.     </li> </ul>
Payload	<ul> <li>EO/IR Camera         Supports Electro-Optical (EO) and Infrared (IR) imaging for surveillance and inspection.     </li> <li>Mapping Camera         High-resolution camera for detailed topographic mapping.     </li> <li>3D LiDAR         Terrain mapping, forestry analysis, infrastructure inspection, and topographic surveys.     </li> <li>Megaphone System         For aerial broadcasting and emergency response.     </li> </ul>	<ul> <li>EO/IR Camera         Supports Electro-Optical (EO) and Infrared (IR) imaging for surveillance and inspection.</li> <li>Mapping Camera         High-resolution camera for detailed topographic mapping.</li> <li>3D LiDAR         Terrain mapping, forestry analysis, infrastructure inspection, and topographic surveys.</li> <li>Megaphone System         For aerial broadcasting and emergency response.</li> </ul>
Edge Al Device	Not Supported	Not Supported
4G/5G LTE	<ul> <li>External modem         Allowing flexible network adaptation but requiring additional hardware.     </li> </ul>	<ul> <li>External modem         Allowing flexible network adaptation but requiring additional hardware.     </li> </ul>
Station Compatibility	<ul> <li>Compatible with ARGOSDYNE's drone stations</li> <li>Enabling autonomous deployment and recharging.</li> </ul>	Customizable compatibility  Allowing modifications for specific docking and charging solutions.

AQUILA-2+	AQUILA-3F+	
Quadrotor UAVs	Quadrotor UAVs	
Optimized for multi-purpose applications.	Optimized for multi-purpose applications.	
• 495 x 455 x 287 (W x L x H)	• 584 x 583 x 325 (W x L x H)	
● 1.5Kg	• 3.0Kg	
<ul> <li>Qualcomm RB5 platform with multi-core CPU Enabling advanced Al-based computing and real-time data processing.</li> </ul>	<ul> <li>Qualcomm RB5 platform with multi-core CPU Enabling advanced Al-based computing and real-time data processing.</li> </ul>	
Integrated AI CPU	Integrated AI CPU	
Allowing onboard machine learning and object detection for autonomous flight.	Allowing onboard machine learning and object detection for autonomous flight.	
<ul> <li>EO/IR Camera</li> <li>Supports Electro-Optical (EO) and Infrared (IR) imaging for surveillance and inspection.</li> </ul>	<ul> <li>EO/IR Camera         Supports Electro-Optical (EO) and Infrared (IR) imaging for surveillance and inspection.     </li> </ul>	
Mapping Camera	Mapping Camera	
High-resolution camera for detailed topographic mapping.	High-resolution camera for detailed topographic mapping.	
3D LiDAR  Tourning mapping forgetry analysis introstructure inspection.	3D LiDAR  Torroin mapping forgetry analysis intractructure inspection	
Terrain mapping, forestry analysis, intrastructure inspection, and topographic surveys.	Terrain mapping, forestry analysis, intrastructure inspection and topographic surveys.	
Megaphone System	Megaphone System	
For aerial broadcasting and emergency response.	For aerial broadcasting and emergency response.	
LTE Network Measurement Device	LTE Network Measurement Device	
Supports network quality testing, making it ideal for telecom infrastructure evaluation and optimization.	Supports network quality testing, making it ideal for telecom infrastructure evaluation and optimization.	
Supported (ex: people, car, number plate)	Supported (ex: people, car, number plate)	
Al-powered onboard computing enables real-time data analysis, autonomous decision-making, and	Al-powered onboard computing enables real-time data analysis, autonomous decision-making, and enhanced	
enhanced object recognition.	object recognition.	
Integrated LTE/5G modem	Integrated LTE/5G modem	
Ensuring seamless communication and real-time data transmission without external devices.	Ensuring seamless communication and real-time data transmission without external devices.	
Compatible with ARGOSDYNE's drone stations	Customizable compatibility	
Enabling autonomous deployment and recharging.	Allowing modifications for specific docking and charging solutions.	



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