ARGOSDYNE

DRONE AQUILA

DRONE FOR EVERYONE

Argosdyne. Product Catalog

Drone Technology Innovates for a Better Future

ARGOSDYNE

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.

Table of

CONTENTS

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

Keyword

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

C2 certification

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, enablintg fully customized configurations.

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

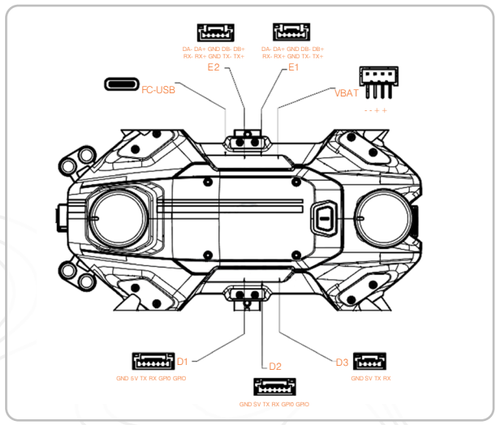
The camera can be easily swapped using a quick-release system, supporting various types ranging from Full HD to 4K EO/IR cameras.

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

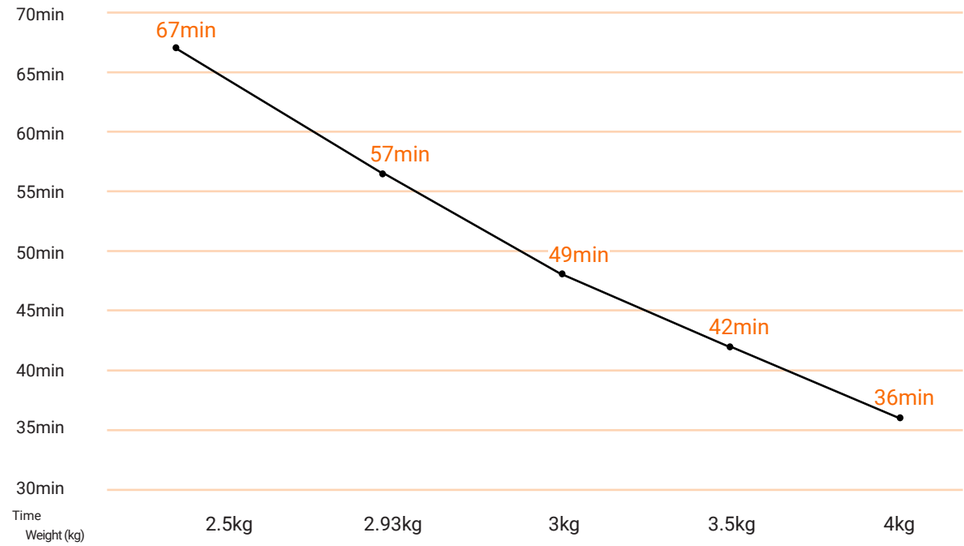
Its dual GPS modules ensure precise positioning even in challenging electromagnetic environments—without the need for an RTK system.

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.



Aquila-2 Flight Time



Aquila-2 Technical Specification

Size (WxLxH)	495.3 × 455.2 x 286.4 mm
Drone Type	Quadcopter
Battery Capacity(2type)	10,000 / 12,000mAh
Weight with Battery	2.5kg
Max. Flight Altitude	1.5Km
Max. Wind Resistance	15m/s
Max.Takeoff/Land Speed	6-10m/s (Configurable)
Operation Temperature	-10°C~50°C
GNSS System	Dual GPS-GPS, GLONASS, Galileo, BeiDou
Failsafe	Battery Failsafe, Signal Loss Failsafe

Num of Motors	4
Diagonal Size	600mm
Weight (Max Payload)	1.5kg
Max. Takeoff Weight	4Kg
Max. Flight Speed	45km/h
Max.FlightTime (without payload)	> 67minutes
Max. Rotation Speed	60°/s
IP Level	IP53
Position Accuracy	± 20cm
Etc.,	Obstacle Avoidance (optional)

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
- AI data processing

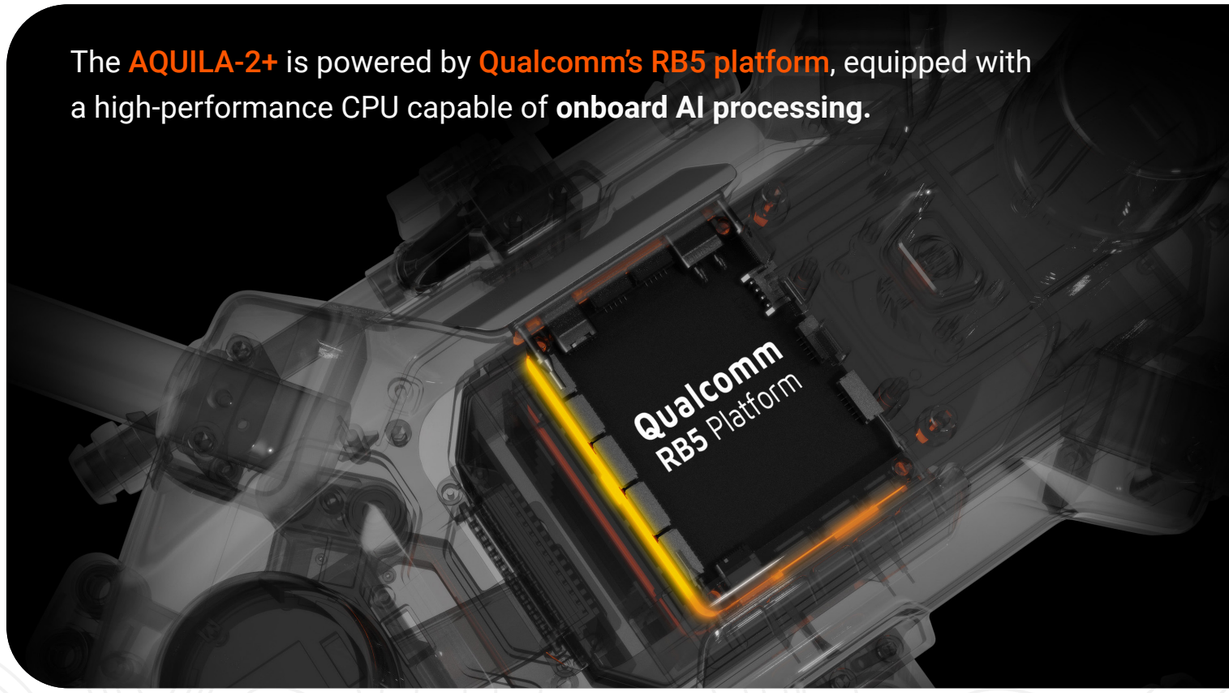
Keyword

- 4G/5G LTE
- Powered by a high-performance CPU based on the Qualcomm RB5 platform.
- AI 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)

The AQUILA-2+ is powered by Qualcomm's RB5 platform, equipped with a high-performance CPU capable of **onboard AI processing.**



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 AI 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.

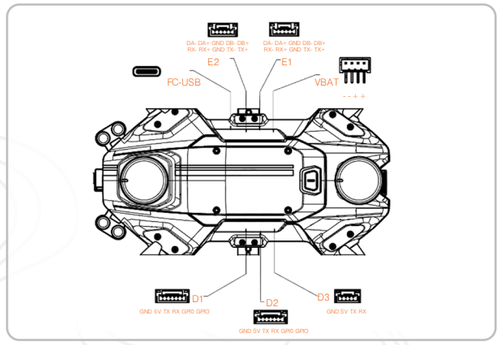
Engineered for endurance, the Aquila-2+ leverages high thrust and energy-efficient design to maximize flight time.

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

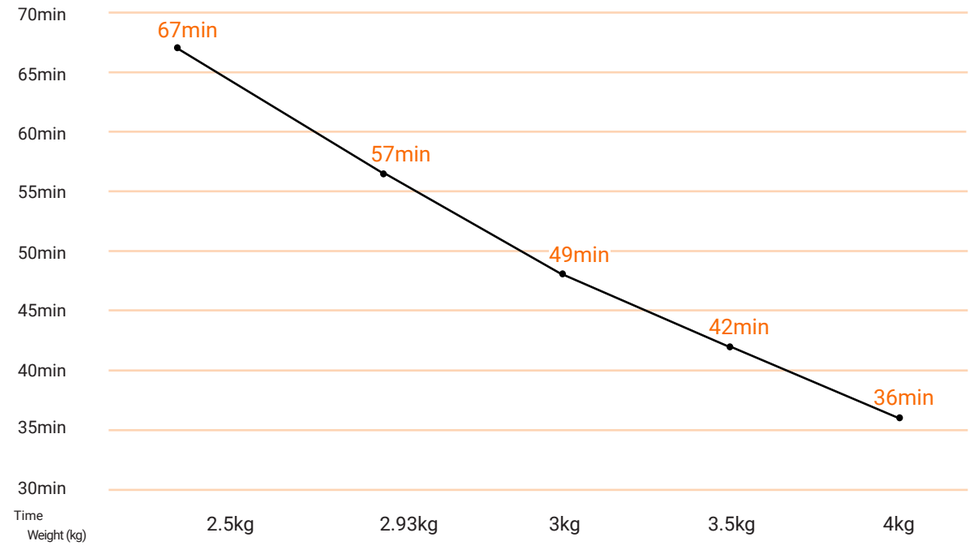
Designed for autonomous and continuous missions, it integrates seamlessly with the Drone Station (Docker-based system).
Its extended flight time, and payload versatility make it ideal for long-duration operations and integration with various communication platforms.

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.



Aquila-2+ Flight Time



Aquila-2+ Technical Specification

Size (WxLxH)	495.3 × 455.2 x 286.4mm
Drone Type	Quadcopter
Battery Capacity(2type)	10,000 / 12,000mAh
Weight with Battery	2.5kg
Max. Flight Altitude	1.5Km
Max. Wind Resistance	15m/s
Max. Take off /Land Speed	6-10m/s (Configurable)
Operation Temperature	-10°C~50°C
GNSS System	Dual GPS-GPS, GLONASS, Galileo, BeiDou
Failsafe	Battery Failsafe, Signal Loss Failsafe

Num of Motors	4
Diagonal Size	600mm
Weight (Max Payload)	1.5kg
Max. Takeoff	4Kg
Max. Flight Speed	45km/h
Max.FlightTime (without payload)	> 67minutes
Max. Rotation Speed	60°/s
IP Level	IP53
Position Accuracy	± 20cm
Etc.,	Obstacle Avoidance (optional)

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

Keyword

- 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.

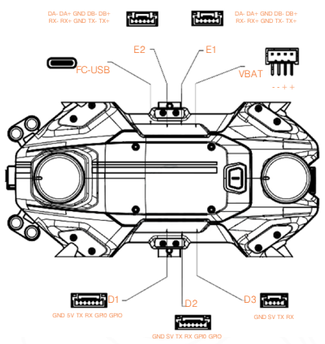
Dual GPS modules with multi-satellite support provide robust positioning accuracy, even in challenging electromagnetic environments.

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.

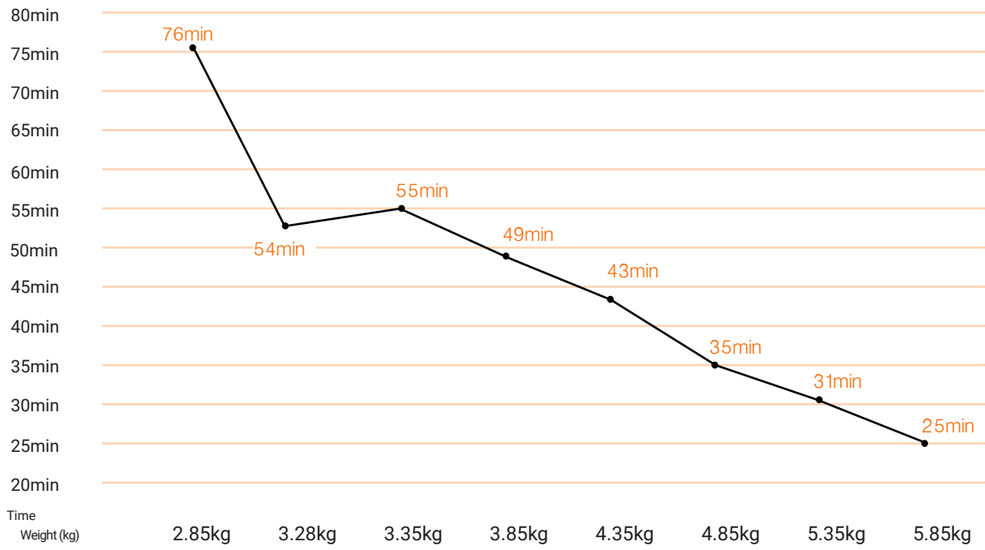
With long flight endurance, a replaceable battery system, and versatile payload compatibility, the Aquila-3F is perfectly suited for extended operations across diverse mission profiles.

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

Folding



Aquila-3F Flight Time



Aquila-3F Technical Specification

Size (WxLxH)	583.58 × 582.42 x 325mm
Drone Type	Quadcopter
Battery Capacity(2type)	10,000 / 12,000mAh
Weight with Battery	2.85kg
Max. Flight Altitude	1.5Km
Max. Wind Resistance	15m/s
Max. Takeoff/Land Speed	6-10m/s (Configurable)
Operation Temperature	-10°C~50°C
GNSS System	Dual GPS-GPS, GLONASS, Galileo, BeiDou
Failsafe	Battery Failsafe, Signal Loss Failsafe

Num of Motors	4
Diagonal Size	780mm
Weight (Max Payload)	3kg
Max. Takeoff Weight	5.85Kg
Max. Flight Speed	45km/h
Max.FlightTime (without payload)	> 76minutes
Max. Rotation Speed	60°/s
IP Level	IP53
Position Accuracy	±20cm
Etc.,	Obstacle Avoidance (optional)

AVIATOR

Smart Controller

Available for the AQUILA series

Control Range: > 3Km

Max. Operation Time: > 4 Hours

Weight 1100g

7-inch, FHD screen

Keyword

- 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

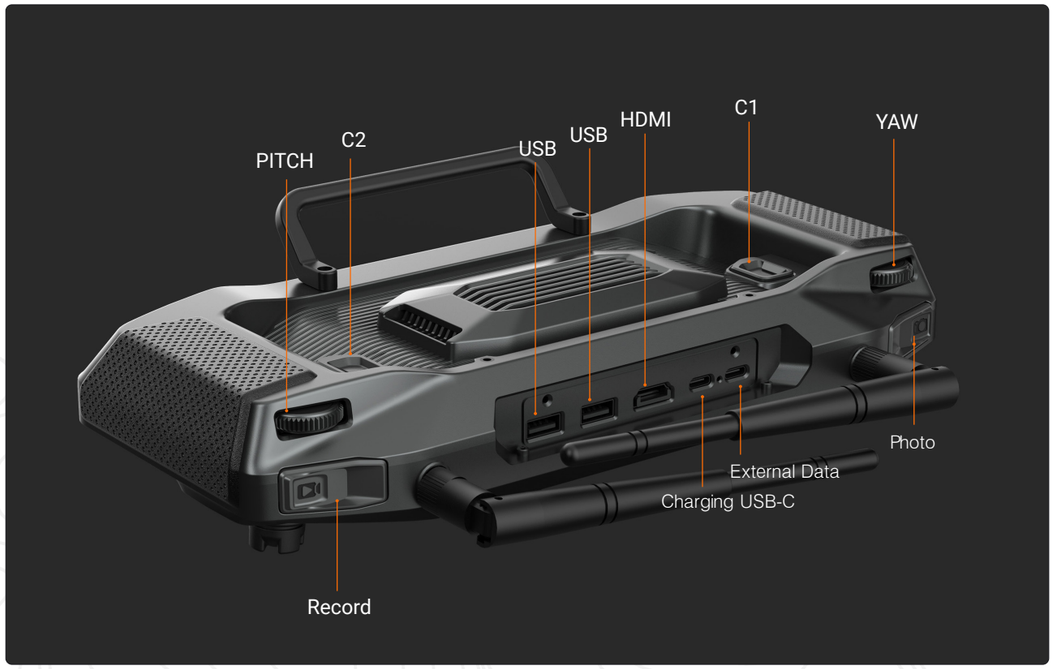
AVIATOR
Smart Controller

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 Controller function

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	10km, VLOS, Output Power = 27db
Display	7”, 1080P, 1000nit
Output Ports	USB*2, HDMI *1, USB-C *2
Operation Temperature	0°C~40°C
Built-in battery	7.4V 10000mAh

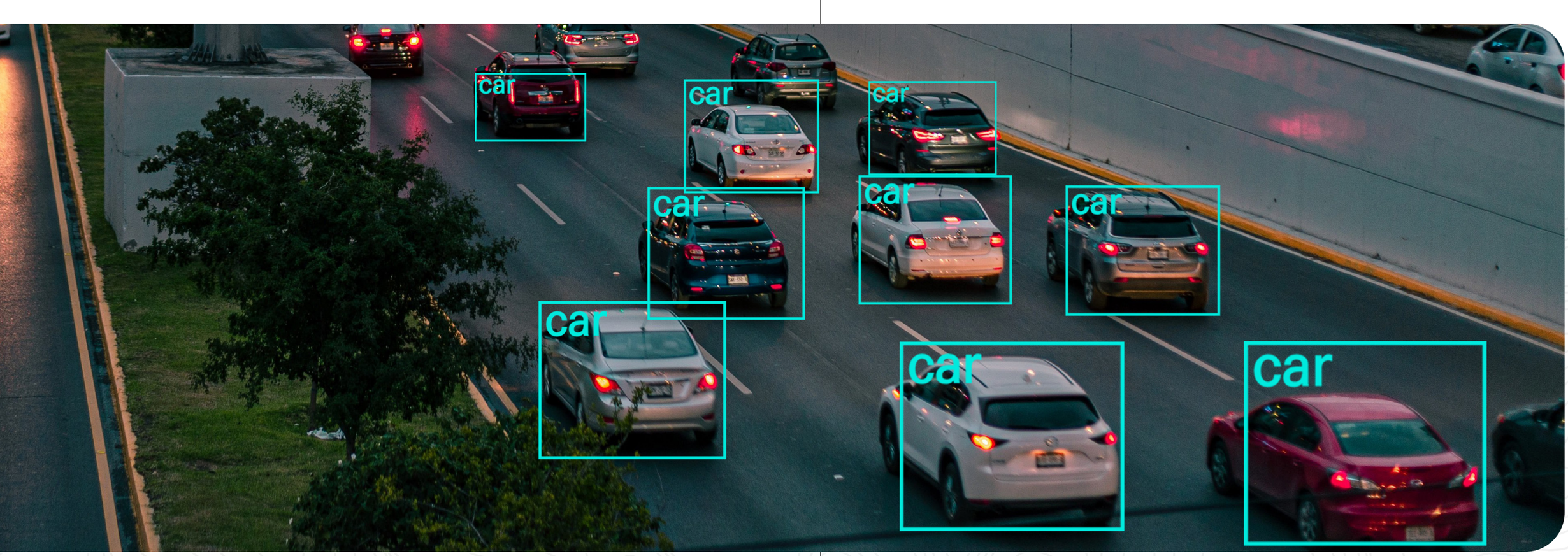
Surveillance
CAMERA

Available for the AQUILA series

- **Precisely captures invisible areas**
- **4K Image quality**
- **x30 Zooming**
- **NVIDIA board**

Keyword

- 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 AI Image Detection
Gimbal control range	Pitch: 90° to +20° Pan: 360°
Operating Temperature	-10°C to 50°C
Power	11~25V

RHYTHM 3 Edge computing performance	
SOM	Nvidia Xavier NX 16G
AI 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 speed	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

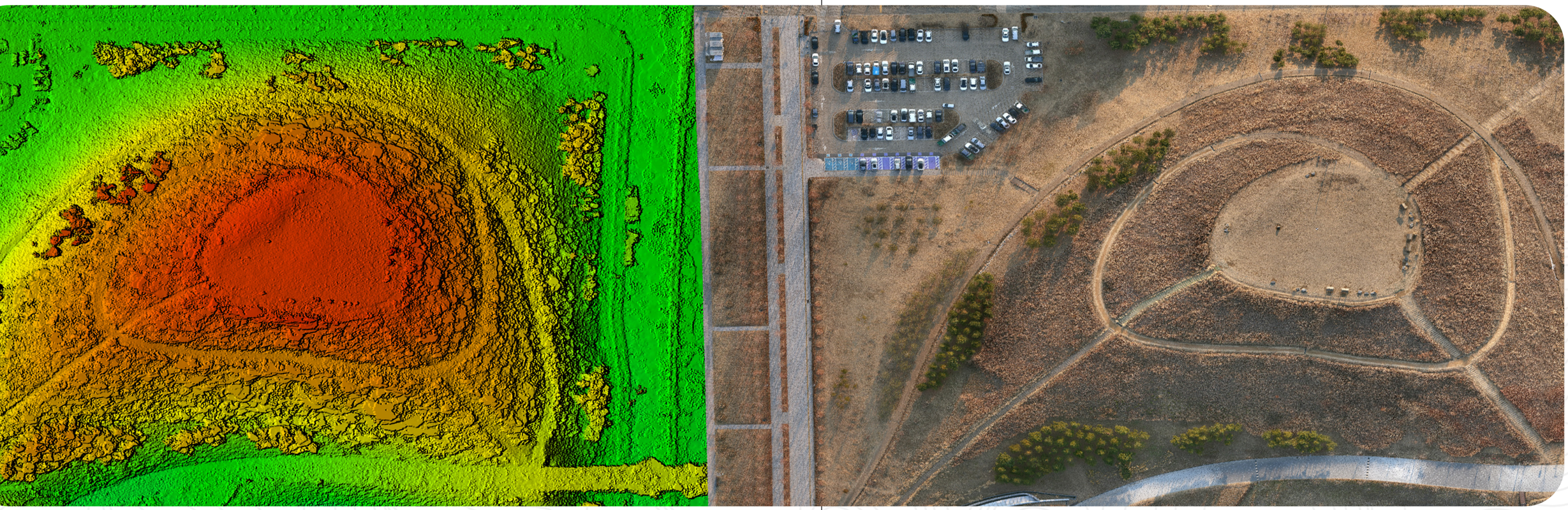
CAMERA & 3D LiDAR

Available for the AQUILA series

- **Reliable and stable flight**
- **Optimized Precision with Specialized Lens Matching**
- **Safe Operating Range**
- **High-Resolution Images**

Keyword

- 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

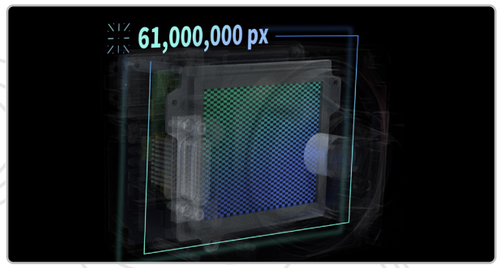
SHARE's in-house imaging module, equipped with a state-of-the-art Sony IMX455 full-frame 61MP sensor and 3.76μm pixels, sets a new standard in aerial surveying and mapping.

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

Mapping
3D LiDAR

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

Surveyor Ultra OEM Tethering System			
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
Max. rec. flying height	120 m	Weight	0.754 kg

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 m
Laser wavelength	905 nm
Scanner field-of-view	70.4° x 4.5°
GNSS inertial solution	Applanix APX-15
Max. rec. flying height	100 m
Max. data generated	720k pts/sec
RGB Camera	(VERSION-A): Optional (VERSION-C): 8 MP
Precision	3.5cm
Accuracy	4cm
Power consumption	19W
Size (WxLxH)	(VERSION-A): 144 x 66 x 93 mm (VERSION-C): 100 x 97 x 94 mm
Weight	(VERSION-A): 0.75 kg (VERSION-C): 0.73 kg

AQUILA Comparsion

Feature	AQUILA-2	AQUILA-3F	AQUILA-2+	AQUILA-3F+
Drone Type	• Quadrotor UAVs Optimized for multi-purpose applications.	• Quadrotor UAVs Optimized for multi-purpose applications.	• Quadrotor UAVs Optimized for multi-purpose applications.	• Quadrotor UAVs Optimized for multi-purpose applications.
Size (mm)	• 495 x 455 x 287 (W x L x H)	• 584 x 583 x 325 (W x L x H)	• 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	• 1.5Kg	• 3.0Kg
Companion Computer	• Embedded 32-bit MICOM Designed for lightweight control and stability.	• Embedded 32-bit MICOM Designed for lightweight control and stability.	• Qualcomm RB5 platform with multi-core CPU Enabling advanced AI-based computing and real-time data processing. • Integrated AI CPU Allowing onboard machine learning and object detection for autonomous flight.	• Qualcomm RB5 platform with multi-core CPU Enabling advanced AI-based computing and real-time data processing. • Integrated AI CPU Allowing onboard machine learning and object detection for autonomous flight.
Payload	• EO/IR Camera Supports Electro-Optical (EO) and Infrared (IR) imaging for surveillance and inspection. • Mapping Camera High-resolution camera for detailed topographic mapping. • 3D LiDAR Terrain mapping, forestry analysis, infrastructure inspection, and topographic surveys. • Megaphone System For aerial broadcasting and emergency response.	• EO/IR Camera Supports Electro-Optical (EO) and Infrared (IR) imaging for surveillance and inspection. • Mapping Camera High-resolution camera for detailed topographic mapping. • 3D LiDAR Terrain mapping, forestry analysis, infrastructure inspection, and topographic surveys. • Megaphone System For aerial broadcasting and emergency response.	• EO/IR Camera Supports Electro-Optical (EO) and Infrared (IR) imaging for surveillance and inspection. • Mapping Camera High-resolution camera for detailed topographic mapping. • 3D LiDAR Terrain mapping, forestry analysis, intrastructure inspection, and topographic surveys. • Megaphone System For aerial broadcasting and emergency response. • LTE Network Measurement Device Supports network quality testing, making it ideal for telecom infrastructure evaluation and optimization.	• EO/IR Camera Supports Electro-Optical (EO) and Infrared (IR) imaging for surveillance and inspection. • Mapping Camera High-resolution camera for detailed topographic mapping. • 3D LiDAR Terrain mapping, forestry analysis, intrastructure inspection, and topographic surveys. • Megaphone System For aerial broadcasting and emergency response. • LTE Network Measurement Device Supports network quality testing, making it ideal for telecom infrastructure evaluation and optimization.
Edge AI Device	Not Supported	Not Supported	• Supported (ex: people, car, number plate...) AI-powered onboard computing enables real-time data analysis, autonomous decision-making, and enhanced object recognition.	• Supported (ex: people, car, number plate...) AI-powered onboard computing enables real-time data analysis, autonomous decision-making, and enhanced object recognition.
4G/5G LTE	• External modem Allowing flexible network adaptation but requiring additional hardware.	• External modem Allowing flexible network adaptation but requiring additional hardware.	• Integrated LTE/5G modem Ensuring seamless communication and real-time data transmission without external devices.	• Integrated LTE/5G modem Ensuring seamless communication and real-time data transmission without external devices.
Station Compatibility	• Compatible with ARGOSDYNE's drone stations Enabling autonomous deployment and recharging.	• Customizable compatibility Allowing modifications for specific docking and charging solutions.	• Compatible with ARGOSDYNE's drone stations Enabling autonomous deployment and recharging.	• Customizable compatibility Allowing modifications for specific docking and charging solutions.

ARGOSDYNE Product Catalog

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