



AQUILA

Drone for everyone

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AQUILA-2

Drone for everyone

In the most convenient way for users
Provides usable systems and services



Waterproof Grade
IP 53



Flight Time up to
67minutes



Dual GPS support
Improve flight safety

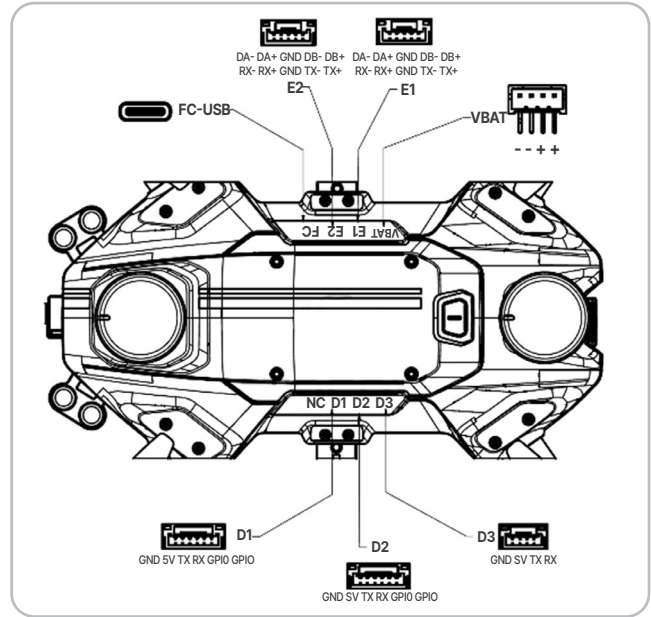


Up to 1.5 kg
mission equipment



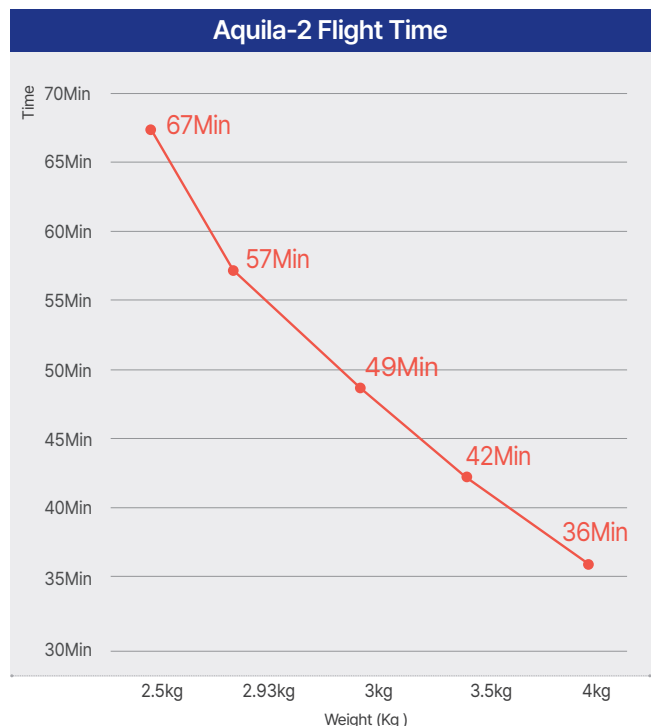
AQUILA-2 Mapping/Surveillance System

1. Multi-Purpose Drone, AQUILA-2



- The Aquila-2 drone by ARGOSDYNE is a versatile and customizable solution for construction, law enforcement, and mapping.
- It offers stable flight performance and extended flight time. Its components, including software, are designed in-house, allowing for tailored configurations. The drone comes with a variable camera, remote controller, and speaker system. The camera can be easily swapped using the "quick release" system, supporting different types from full HD to 4K EO/IR cameras.
- The Aquila-2 utilizes low power efficiently, enabling longer flight duration, and its dual GPS modules ensure precise positioning without an RTK system, even in electromagnetic environments.
- It integrates seamlessly with the Drone Station (Docking System) for autonomous and continuous missions. The drone's long flight time, replaceable batteries, and support for various payloads make it suitable for extended operations and adaptable to different communication systems.
- Additionally, the Aquila-2 provides external I/O ports, allowing customers to easily connect their own devices to the drone.

Aquila-2 Technical Specification			
Size (W x L x H)	495.3 x 455.2 x 286.4mm	Num of Motors	4
Drone Type	Quadcopter	Diagonal Size	600mm
Battery Capacity	10,000mAh	Weight (Dry)	1.3kg
Weight with Battery	2.5kg	Max. Takeoff Weight	4Kg
Max. Flight Altitude	1.5Km	Max. Flight Speed	45km/h
Max. Wind Resistance	15m/s	Max. Flight Time (without payload)	> 67minute
Max. Takeoff/Land Speed	6 ~ 10m/s (Configurable)	Max. Rotation Speed	60°/s
Operation Temperature	-10°C ~ 50°C	IP Level	IP53
GNSS System	Dual GPS - GPS, GLONASS, Galileo, BeiDou	Position Accuracy	±20cm
Failsafe	-Battery Failsafe -Signal Loss Failsafe	Etc.,	Obstacle Avoidance (optional)







AQUILA-2⁺

Drone for everyone

In the most convenient way for users
Provides usable systems and services



Waterproof Grade
IP 53



Flight Time up to
67minutes



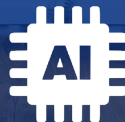
Dual GPS support
Improve flight safety



Up to 1.5 kg
mission equipment

5G

Built-in 5G Router

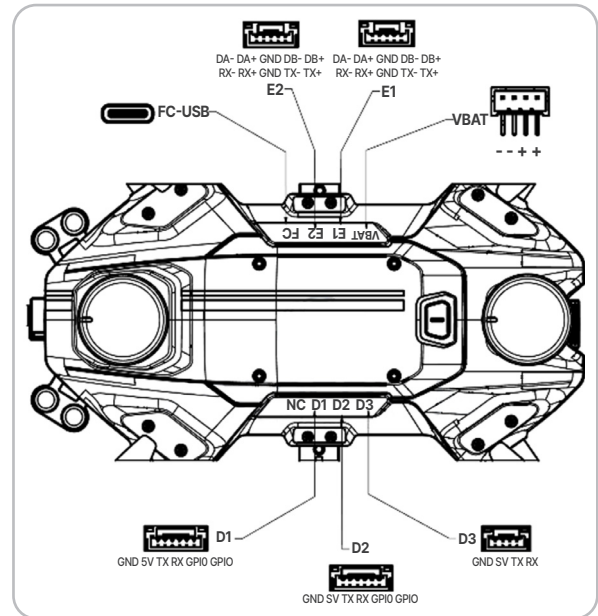


AI data processing



AQUILA-2⁺ Mapping/Surveillance System

1. Multi-Purpose Drone with 5G communication, AQUILA-2⁺



- The Aquila-2+ drone by ARGOSDYNE is a versatile and customizable solution for construction and mapping applications. Aquila-2+ supports 5G communication with built-in 5G LTE, and provides RB5-based high performance CPU, which provides various data processing and ML/AI functions, so Aquila-2+ can process AI on its own without relying on an AI server. The drone's self-designed components and software allow for tailored configurations.
- The Aquila-2+ features a quick-release system for effortless camera replacement, supporting a wide range of options from full HD to 4K EO/IR cameras. Customers can select the most suitable camera for their specific needs.
- With its powerful thrust and efficient power consumption, the Aquila-2+ ensures extended flight duration. It incorporates dual GPS modules, receiving signals from multiple satellite systems for accurate positioning, even in electromagnetic field environments.
- The drone is compatible with ARGOSDYNE's drone station, enabling autonomous and continuous mission flights. The drone station automatically charges the battery, facilitating uninterrupted operations without human intervention.
- The Aquila-2+'s long flight time, replaceable battery, and support for various payloads make it well-suited for extended operations and adaptable to different applications. It is designed to work with 5G, LTE, Wi-Fi, and other OFDM modules, ensuring flexibility and compatibility with diverse communication systems.

Aquila-2 ⁺ Technical Specification			
Size (W x L x H)	500 x 450 x 265 mm	Num of Motors	4
Drone Type	Quadcopter	Diagonal Size	600mm
Battery Capacity	10,000mAh	Weight (Dry)	1.3kg
Weight with Battery	2.5kg	Max. Takeoff Weight	4Kg
Max. Flight Altitude	1.5Km	Max. Flight Speed	45km/h
Max. Wind Resistance	15m/s	Max. Flight Time (without payload)	> 67minute
Max. Takeoff/Land Speed	6 ~ 10m/s (Configurable)	Max. Rotation Speed	60°/s
Operation Temperature	-10°C ~ 50°C	IP Level	IP53
GNSS System	Dual GPS - GPS, GLONASS, Galileo, BeiDou	Position Accuracy	±20cm
Failsafe	-Battery Failsafe -Signal Loss Failsafe	Etc.,	Obstacle Avoidance (optional)





AQUILA-3F

Drone for everyone

In the most convenient way for users
Provides usable systems and services



Waterproof Grade
IP 53



Flight Time up to
76 minutes



Dual GPS support
Improve flight safety

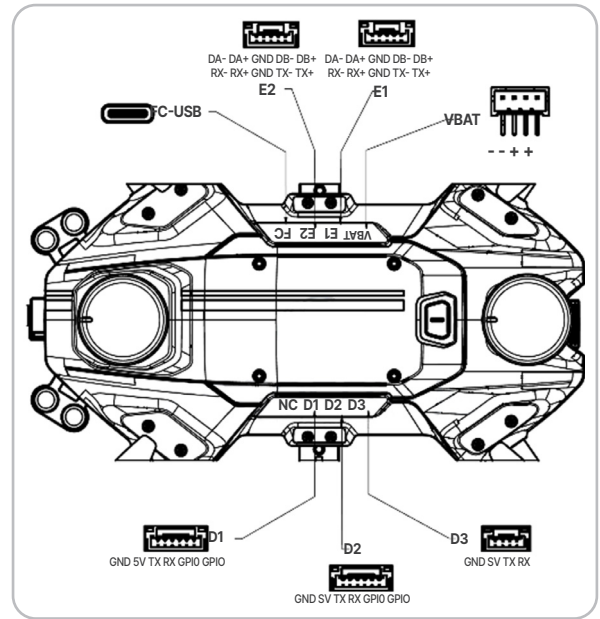


Up to 3 kg
mission equipment



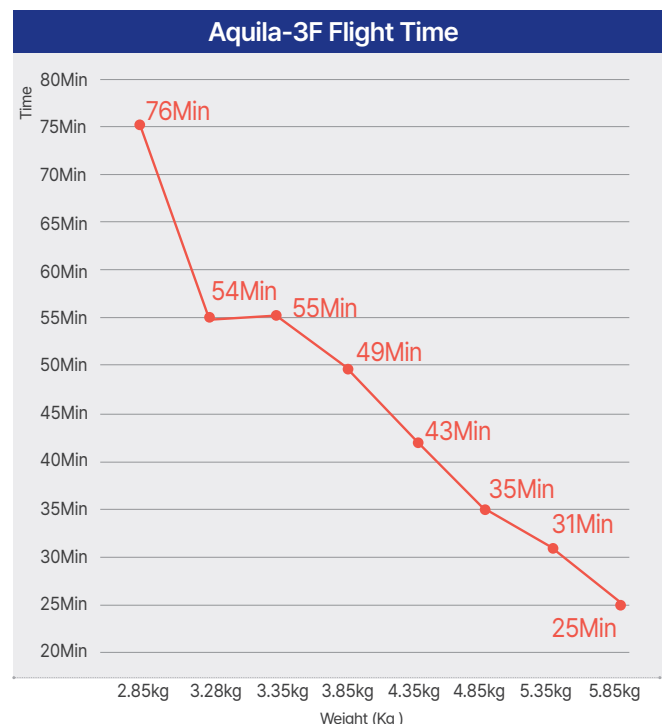
AQUILA-3F Mapping/Surveillance System

1. Multi-Purpose Drone with long Flight Time, AQUILA-3F



- The Aquila-3F drone by ARGOSDYNE is a versatile and customizable solution for construction, law enforcement, and mapping applications. It offers stable flight performance, a long flight time, and foldable arms for easy transportation and space-saving. The drone's self-designed components and software allow for tailored configurations. It comes equipped with various cameras, searchlights, and speaker systems.
- The Aquila-3F features a quick-release system for effortless camera replacement, supporting a wide range of options from full HD to 4K EO/IR cameras. Customers can select the most suitable camera for their specific needs.
- With its powerful thrust and efficient power consumption, the Aquila-3F ensures extended flight duration. It incorporates dual GPS modules, receiving signals from multiple satellite systems for accurate positioning, even in electromagnetic field environments.
- The drone is compatible with ARGOSDYNE's drone station, enabling autonomous and continuous mission flights. The drone station automatically charges the battery, facilitating uninterrupted operations without human intervention.
- The Aquila-3F's long flight time, replaceable battery, and support for various payloads make it well-suited for extended operations and adaptable to different applications. It is designed to work with LTE, Wi-Fi, and other OFDM modules, ensuring flexibility and compatibility with diverse communication systems.

Aquila-3F Technical Specification			
Size (W x L x H)	590 x 575 x 285 mm	Num of Motors	4
Drone Type	Quadcopter	Diagonal Size	780mm
Battery Capacity	10,000mAh	Weight (Dry)	1.6kg
Weight with Battery	2.8kg	Max. Takeoff Weight	5.8kg
Max. Flight Altitude	1.5Km	Max. Flight Speed	45km/h
Max. Wind Resistance	15m/s	Max. Flight Time (without payload)	> 76minute
Max. Takeoff/Land Speed	6 ~ 10m/s (configurable)	Max. Rotation Speed	60°/s
Operation Temperature	-10°C ~ 50°C	IP Level	IP53
GNSS System	Dual GPS - GPS, GLONASS, Galileo, BeiDou	Position Accuracy	±20cm
Failsafe	-Battery Failsafe -Signal Loss Failsafe	Etc.,	Obstacle Avoidance (optional)





AVIATOR

Smart Controller

Available for the AQUILA series

AVIATOR-Smart Controller

1. Controller – AVIATOR

The AVIATOR remote controller is designed to operate the drone within a maximum visible range (VLOS) of up to 10km, using the OFDM communication method. Through this advanced communication system, you can be sure that the drone operates responsively and stays connected even at short and long ranges. AVIATOR is the perfect remote controller that guarantees complete control of the drone from anywhere.

AVIATOR



AVIATOR Technical Specification

Size (W x L x H)	280 × 150 × 60 mm
Weight	1100g
Communication	OFDM
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 Time	0°C ~ 40°C
Power	Lithium Battery

 ARGOSDYNE



Surveillance
C A M E R A

Available for the AQUILA series



Surveillance Camera

1. 4K Video Surveillance Camera

- The ZR30 gimbal camera supports up to 180x hybrid zoom and up to 30x optical zoom, providing a sharp and highly detailed view. With fast and accurate algorithms, high-quality videos can be easily outputted, and focusing can also be done quickly and easily. These features will be very useful for all users who want to create professional videos or high-quality content. The ZR30 gimbal camera looks to be a powerful tool suitable for various purposes.
- The ZR30 gimbal camera, built-in with a new algorithm, can autonomously identify moving objects such as vehicles, boats, and people. Along with gimbal rotation and UAV flight control systems, the ZR30 performs a comprehensive smart operation of continuous tracking in identification and positioning. The ZR30 always keeps the tracked target at the center of the image.

ZR30



ZR30 4K Camera Technical Specification

Size (W x L x H)	132 × 100 × 159 mm
Weight	628g
Lens	30x Optical Zoom, Focal Length 4.5 ~ 184mm
Image Sensor	1/2.7 inch
Resolution	8MP (effective)
Aperture	F1.3 ~ F2.8
FOV	Diag = 65.4°, Hor = 58.1°
Resolution of Streaming	1080P/720P, 4Mbps
Resolution of Recording	4K/2K/1080P/720P, 12Mbps
File Format	FAT32
Image Format	JPEG
Video Format	MP4
Storage Media Type	MicroSD Class 10, 128GB
Capture Mode	Single
Video Output Port	Micro HDMI/Ethernet
Operation Temperature	-10°C ~ 50°C
Power	11 ~ 25V

Surveillance Camera

2. Multi-Function Surveillance Camera

- The ZT30 multifunction camera offers four features in one camera: a 4K zoom camera, a wide-angle camera, a thermal camera, and a laser range finder. It is a hybrid sensor solution that leads the industry. The zoom camera, thermal camera, laser rangefinder, and wide-angle camera work efficiently together to detect heat sources, measure distances to targets, and capture clearer photos and wider views.
- The ZT30 multifunction camera features a 640×512 resolution thermal imaging sensor with a 19mm focal length and 30fps frame rate. It offers a wide field of view and can see far distances, with smooth and clear video output. When an abnormal thermal source is detected, infrared images can be touched to measure temperature, allowing for quick and accurate action to be taken.
- The ZT30 multifunction camera also comes with a distance measuring instrument that has a range of 1200 meters and a measurement accuracy of 0.1m. It is sensitive and reliable, allowing for accurate real-time coordinates to be obtained in high-risk work environments, helping to ensure a safe working space by facilitating quick decision-making.
- With an NPU (neural computing unit) embedded in the ZT30 multifunction camera, it can automatically identify moving targets such as people, vehicles, and ships. Through collaboration with gimbal posture control and flight control systems, it can autonomously identify, locate, and continuously track targets. The automatic zoom function of the vision camera keeps the target in the center of the screen, maintaining a clear and distinct screen ratio.
- In addition to the 180x hybrid zoom (30x optical zoom) 1/2.7-inch Sony 4K image sensor camera, the ZT30 multifunction camera also has a 2K resolution wide-angle camera, offering an unprecedented wide field of view and panorama shooting function. The landscape is sharp, the algorithm is fast and accurate, and the perspective is automatically focused, making it easy to create magnificent photos.

ZT30 Camera



Camera Image



ZT30 Technical Specification			
Basic			
Size (W x L x H)	182 × 140 x 135 mm	Video Output Port	Micro HDMI/ Ethernet
Weight	870g	Capture Mode	Single
Storage Media Type	MicroSD Class 10, 128GB	Operation Temperature	-10°C - 50°C
File Format	FAT32	Power	11 ~ 25V
Gimbal Device			
Pitch Angle	-90° ~ +25°	Roll Angle	-45° ~ +45°
Yaw Angle	-100° ~ +180°		
4K Zoom Camera			
Lens	30x Optical Zoom, Focal Length: 4.8 ~ 148mm	Resolution of Record	4K/2K/1080P/720P, 12Mbps
Image Sensor	1/2.7 inch	Resolution of Streaming	1080P/720P, 4Mbps
Resolution	8MP (effective)	Image Resolution	4K (4096 x 2160)
Aperture	F1.3 ~ F2.8	FOV	Hor: 62°
Thermal Camera			
Resolution	640 × 512	Range of Measurement	High-Gain: -20°C ~ 150°C (±2°C)
Digital Zoom	2x		Low-Gain: 0 ~ 550°C (±3°C)
Wavelength	8 ~ 14 μm		Method: point measurement or Screen Average
Lens	Focal Length: 19mm, Aperture: F1.1, Fixed focus		
Wide Angle Camera			
Image Sensor	1/2.8 inch	File Format	FAT32
Resolution	4MP (effective resolution)	Resolution of Streaming	2K (2560 x 1440) @ 30FPS
Focal Length	21mm	Resolution of Recording	2K (2560 x 1440)
Wide Angle Camera			
Range of Measurement	5 ~ 1,200m		
	±1 m (3 ~ 100 m)		
Period of Measurement	> ±1 (100 ~ 600 m)		
	3Hz		

Surveillance System

3. Tethering System

- A drone tethering system is a setup that connects a drone to a ground-based power source or data station using a cable or tether. The tether provides the drone with power and communication capabilities, allowing for long-duration flights without the need for battery replacement or recharging. Such tethered drones are often used for tasks that require extended flight times, such as surveillance, inspection, or live broadcasting.
- The advantages of drone tethering systems are as follows:
 1. Extended flight time: Drone tethering systems enable long flight times without the need for battery replacement or recharging, making them ideal for tasks that require extended periods of surveillance, inspection, or live streaming.
 2. Stable flight: Tethered drones are anchored, resulting in less susceptibility to wind or other environmental factors, resulting in more stable flight and better quality footage.
 3. Increased safety: Tethering a drone to the ground makes both the drone and the surrounding environment safer. In the event of a malfunction, the drone can be safely landed without the risk of damage to people or property.
 4. Improved data transmission: Tethering a drone to a ground-based power source or data station enables high-speed data transfer, allowing for real-time data processing and analysis, and providing users with immediate insights and information.
 5. Cost-effectiveness: Drone tethering systems can reduce operating costs over extended periods of use, as they do not require multiple battery packs and chargers.
- As described above, Drone tethering systems offer various advantages as an attractive solution in various application fields.



Drone Tethering System	
Ground System	
Size (W x L x H)	422 × 350 × 225 mm
Weight	13.45Kg (including cables)
Out Power	3Kw
Input Voltage	AC 220V+10%
Output Voltage	DC 380 ~ 420V
Rated Output Current	9A (In case that Input Voltage 220VAC)
Rated Input Current	< 16A
Max. Input Surge Current	9A (In case that Input Voltage 220VAC)
Take-Up Method	Auto / Manual
Drone	
Size (W x L x H)	103 × 53 × 47 mm
Weight	400g
Input Voltage	380VDC ~ 410VDC
Output Voltage	23.7VDC ~ 25.2VDC
Heat Dissipation System	Air Cooling

 ARGOSDYNE



M a p p i n g
C A M E R A

Available for the AQUILA series

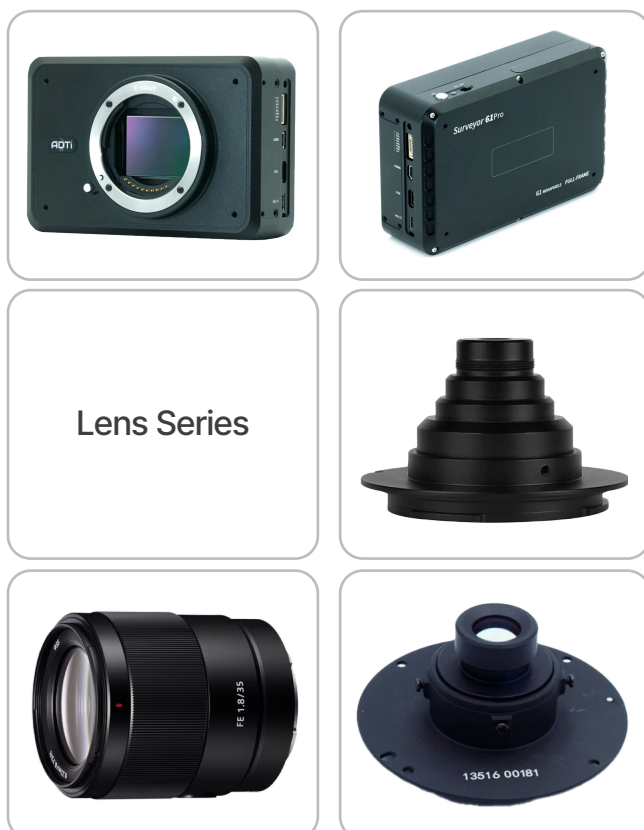


Mapping Camera

1. Advanced Mapping Camera with 61 Megapixels for Unmatched Precision

- The Surveyor Max 61S camera is the most advanced mapping solution available, designed to deliver unparalleled accuracy and precision. With an impressive 61 megapixel full-frame CMOS sensor, this camera captures incredibly detailed images that provide even more accurate mapping data than ever before. The increased pixel count ensures that you can achieve precise and accurate mapping results, even in the most challenging conditions. Whether you're working on a large-scale construction project or a complex surveying job, the Surveyor Max 61S camera is the perfect tool for achieving the highest level of mapping accuracy and precision.
- The Surveyor Max 61S camera is equipped with a range of advanced features that make it an essential tool for aerial mapping. With support for FE, E, and A-mount lenses (with adapter), the Surveyor Max 61S camera offers unparalleled flexibility in lens selection. The Bionz X image processor and built-in Multi-Interface hot shoe output for PPK ensure top dynamic range and very low noise, while 10 frames per second with full autofocus and 4K video capability enable you to capture high-quality, high-resolution images and videos.
- One of the unique features of the Surveyor Max 61S camera is its full-frame sensor, which has more than 2.5 times the surface area of an APS-C sensor. This is essential for aerial mapping, as it allows the camera to capture more data with each shot, resulting in higher-quality and more accurate mapping data. Compared to an APS-C sensor camera with the same front and side overlap, the full-frame sensor can save over 35% flight time for the same map quality.
- The Surveyor Max 61S camera also features two IMAGE SD card slots and a GPS POS TF card slot for storage of .TXT files containing GPS POS data. This means that you will have a set of images (SD cards) and a text file (TF card) containing a list of accurate coordinates corresponding to each photo, ensuring precise and accurate mapping results. For even higher accuracy, the Surveyor Max 61S camera can be connected to a GPS GNSS and offers PPK output from its hotshoe, enabling you to timestamp on PPK GNSS Modules each time a photo is captured for accuracy mapping missions.
- Overall, the Surveyor Max 61S camera is the most advanced mapping solution available, offering unmatched accuracy, precision, and flexibility for your aerial mapping needs.

ADTi Surveyor Max 61S



ADTi Surveyor Max 61S Technical Specification			
Size (W x L x H)	103 × 80 × 42 mm	Continuous Shooting	2.5 frames per second, 5 frames per second (burst)
weight	220g (lens excluded)	Geo-Tagging	Supported
Image Sensor	Full frame BSI CMOS sensor (35.7×23.8mm)	Storage Card Type	SDHC/SDXC Card/MS
Number of Pixels	60.2MP (effective)	Storage	SD Card, max. 512GB
Pixel Dimensions	9504 × 6336	Parameter Settings	Button/USB
Pixel Size	3.76µm	Interface	Micro HDMI/USB3.0
Hot Shoe signal	Supported	Lenses	Full Frame Lenses and Sony E-mount Lens
Shutter Trigger	PWM signal	Power	12 ~ 28V
Shutter Speed	30 ~ 1/8000 sec		

Mapping Camera

2. High-Resolution Mapping Camera with 42MP

- The ADTi Surveyor 42S camera is an advanced mapping solution that delivers exceptional accuracy and precision. With its 42-megapixel Sony full-frame sensor, this camera guarantees superior image resolution for drone mapping applications. The camera's automatic distortion correction for out-of-camera JPGs, when combined with low distortion lenses, ensures the best reconstruction results.
- When paired with a PPK GNSS module, the ADTi Surveyor 42S camera can offer a ground sampling distance of 0.7 cm/pixel, delivering the highest level of accuracy and precision for your mapping and surveying projects. And at just 274g, the ADTi Surveyor 42S is a lightweight and versatile tool for professionals who require precise mapping data at an affordable price point.
- One of the unique features of the ADTi Surveyor 42S camera is that it is an interchangeable lens camera, requiring a separate lens for use. Our selection of full-frame lenses includes 35mm, 40mm, 50mm, and 56mm options, giving you the flexibility to choose the perfect lens for your specific mapping and surveying needs. Whether you're mapping a construction site, conducting a surveying project, or performing any other mapping task, the ADTi Surveyor 42S camera is the perfect tool for delivering reliable and accurate results.

ADTi Surveyor 42S



ADTi Surveyor 42S with Lens



ADTi Surveyor 42S Technical Specification

Size (W x L x H)	103 × 79 × 42 mm	Shutter Speed	30 ~ 1/8000 sec
weight	274g (lens excluded)	Continuous Shooting	2.5 frames per second, 5 frames per second (burst)
Image Sensor	Full frame Exmor CMOS sensor (35.9×24mm)	Geo-Tagging	Supported
Number of Pixels	42.4MP (effective)	Storage Card Type	SDHC/SDXC Card/MS
Pixel Dimensions	7952 × 5304	Parameter Settings	Button/USB
Pixel Size	4.51µm	Interface	Micro HDMI/ USB TYPE-C
Hot Shoe signal	Supported	Lenses	Full Frame Lenses
Shutter Trigger	PWM signal	Power	12 ~ 28V

Lens Series



Mapping Camera

3. Full Frame Single Lens Aerial Camera

- The utilization of SHARE's in-house image module, which incorporates a cutting-edge Sony IMX455 full-frame 61MP image sensor and 3.76µm pixel size, represents a significant advancement in drone-based surveying and mapping technology.
- The shutter is made of Kimoto material to reduce friction during shooting, increasing lifespan, and the multi-LD low-dispersion lens and multi-layer reinforced nano-coating that filters reflected light ensure stable aerial film quality and transparent imaging.
- TIMESYNC 2.0 technology, microsecond time synchronization between camera, gimbal, flight control and RTK enables GCP-Free operation, and 1080P HD dynamic stream that automatically adjusts according to video transmission distance improves flight stability.

Share 6100X



Share 6100X Technical Specification

Size (W x L x H)	128.5 × 181.5 × 153.3 mm (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 Camera & LiDAR

4. 3D LIDAR, Camera

Drone LiDAR is revolutionizing the way we work, such as creating 3D accurate models and allowing companies to digitize assets like never before. The TrueView™ product series uses a common hardware and software foundation for a family of sensors. The TrueView solution offers innovative drone LiDAR and photogrammetry solutions integrated in lightweight payloads. It allows for fast, easily automated generation of true 3D colorized point clouds, oblique imagery, and orthophotos from a single drone flight.

Trueview 535



Trueview 535 Tethering System	
Data Collection	LiDAR + Imagery
Laser Scanner	Hesai XT32M2X
LiDAR Range - Usable	120 m @ 20% reflectivity
LiDAR Beams/Returns	32/3
Cross-track Field of View (FOV)/Combined	120°
Pulse Repetition Rate	640 kHz
GNSS/INS Performance	Position: 20-50 mm Angle: 0.025 deg Roll/Pitch, 0.08 deg Heading
Scanner Performance	Precision: 5 mm Accuracy: 20 mm
Camera Sensor	Triple 1" mechanical shutter, hardware mid-exposure pulse, 60 MP combined, RGB
Position and Orientation system (POS)	Applanix APX-15
Mass	1.6Kg

Trueview 435/515



Trueview 435 / 515 Tethering System	
Data Collection	LiDAR + Imagery
Laser Scanner	Hesai Pandar XT32M1X
LiDAR Range	80 m @ 20% reflectivity
LiDAR Beams/Returns	16/2 / 32/2
Cross-track Field of View	120°
Pulse Repetition Rate	320 kHz / 640 kHz
GNSS/INS Performance	Position: 20-50 mm Angle: 0.025 deg Roll/Pitch, 0.08 deg Heading
Scanner Performance	Precision: 5 mm Accuracy: 20 mm
Camera Sensor	Dual 1" mechanical shutter cameras, hardware mid- exposure pulse, 2x 20 MP, RGB
Position and Orientation system (POS)	Applanix APX-15
Mass	2.15 Kg / 2.25Kg



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