ACECORE

PRODUCT
Catalog

Contents

About us

Acecore Technologies is a developer, producer, and integrator of high-end professional drone systems. Founded in 2013 to raise the bar in terms of performance and looks in the UAV world. Starting out as end users in drone cinematography ourselves, we felt that there was no platform available that met our standards. So we built our own. Nowadays, we have drones flying in all verticals. And then some.

Mission

#elevatingdrones is our trademark. We made it our mission to augment the commercial drone airspace.

One by one we aim to replace uninspiring, compromised tube frames with handcrafted elevated drones. The Acecore UAVs are tailor-made to your requirements.

Design
With modularity in mind

All our platforms are built to last. Spare parts, updates, and upgrades will remain available for a minimum of four years.

ACECORE
TECHNOLOGIES

x4

02

Designed to perform - The Acecore Zoe is a compact, powerful, and efficient quadcopter. Its aerodynamic carbon fiber frame means it doesn't hang, but stands in the air. Making it highly weatherproof.

The hollow arms generate an active airflow throughout the entire system, pulling hot air out of the airframe. As a result, Zoe is plenty capable for highly demanding situations.

ZOE

x8

The Acecore Zoe is configurable with a fully redundant propulsion system. Upgrading to 8 motors will give you the safety of continuing flight with a motor or propeller failure.

ZOE x4

QUADCOPTER

WEIGHTS

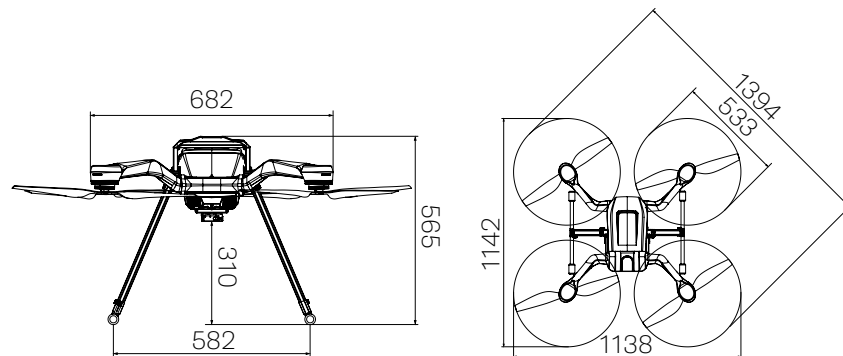|	
Maximum takeoff weight	10.5kg / 23.15lbs
Maximum payload weight	5kg / 11lbs

DRIVE

Motors	4 Acecore brushless motors
Propellers	21'' Carbon propellers
Flight controller	Cube (Orange / Blue)
Battery	Lithium Polymer Tattu 4500mAh up to 17000mAh

FLIGHT

Maximum flight time	47min
Wind resistance	29 knots / 14.9 m/s continuous
Operating temperatures	-15ºC to +50ºC
Maximum downfall	10mm/h 30mm/3h

682
1394
533
565
310
1142
582
1138

ZOE x8

OCTOCOPTER

WEIGHTS

Maximum takeoff weight	11.7kg / 25.8lbs
Maximum payload weight	5.3kg / 11.7lbs

DRIVE

Motors	8 Acecore brushless motors
Propellers	18'' Carbon propellers
Flight controller	Cube (Orange / Blue)
Battery	Lithium Polymer Tattu 4500mAh up to 17000mAh

FLIGHT

Maximum flight time	40min
Wind resistance	35 knots / 18 m/s continuous
Operating temperatures	-15ºC to +50ºC
Maximum downfall	10mm/h 30mm/3h

682
1316
457
565
310
1062
582
1060
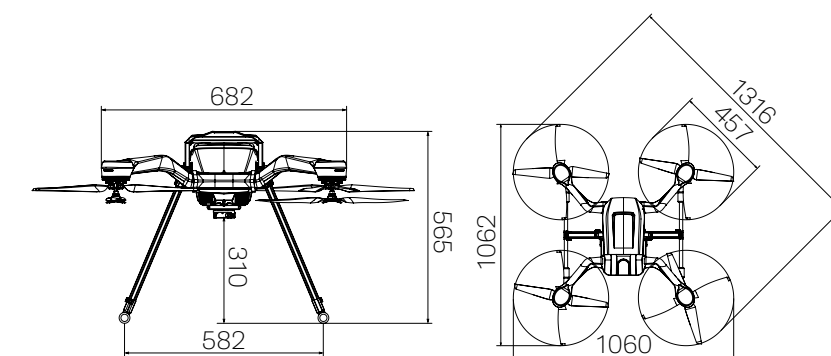
Applications

The Acecore Zoe was designed with versatility in mind - suitable for most applications. Zoe is highly customizable and configurable. The side bracket has several mounting points where additional gear, like payload antennas, can be secured. Our payload mount is configurable to allow for almost all third-party payload integrations.

Yellowscan YS Mapper ▲

LiDAR

We work closely together with YellowScan and Riegl to deliver fully integrated systems that seamlessly work together. Different LiDAR-scanner brand integrations are possible.

Mapping & Inspection

The Zoe paired with the Sony A7r IV offers a perfectly integrated mapping & inspection solution. This means full camera control with real-time georeferencing. GPS coordinates are automatically saved to the images' EXIF data.
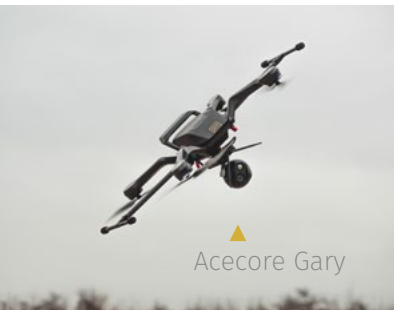

Sony A7r IV ▶

Security

These configurations will suit most security needs. The choice between the workhorse Gary EO/IR and the higher-performing NextVision Raptor X80 all depends on your needs and demands. Both of these sensors make sure your security needs are easily met.

NextVision Raptor X80 ▶

Acecore Gary ▲

ZOE **M4**

The M4 is a military quadcopter, renowned for its high performance, redundancy, and extended endurance. The Zoe M4 comes equipped with the **NextVision Raptor X80**, which offers a long- range EO/IR stabilized image with 80x zoom and a 1280×720 thermal resolution.

- NDAA compliant
- STANAG 4609 video stream
- Configurable datalink (page 41)
- 1625 - 2510 MHz

NextVision Raptor X80

- Long range EO/LWIR stabilized image
- 80x zoom
- 1280×720 thermal resolution
- Low SWaP
- Laser illuminator

Signav Ultra

The proprietary and radio-agnostic Signav Ultra is built on top of the Panasonic FZ-M1. Its radio is configurable from the factory to fit in existing networks. Radio options include **Doodle Labs Smart Radio, Silvus Technologies** and **Persistent Systems MPU5**.
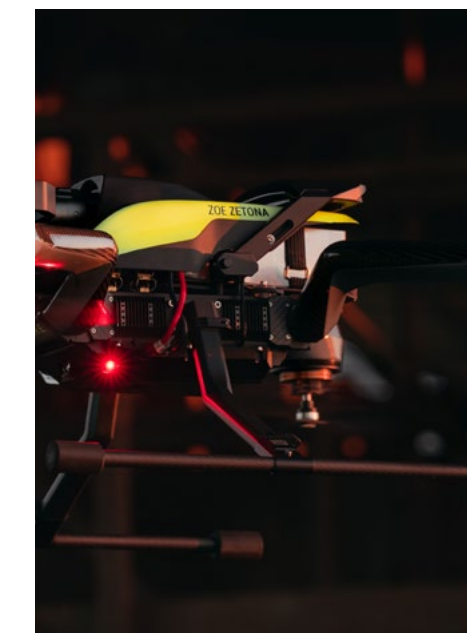
ZETONA

03

The Acecore Zetona is a UAV with a front-mounted 2-axis gimbal. The Zetona gives the operator an unobstructed view from top to bottom; from **Ze**nith **to Na**dir. Revealing even the smallest details thanks to the 61-megapixel Sony A7r IV.

ZETONA

SONY
α7R IV

OCTOCOPTER

Applications

The Zetona is a high-resolution live inspection workhorse. It offers unobstructed views for asset inspection by putting the Sony A7r IV up front. Controlled by the PIC or cam operator the Zetona reveals all details during on- and offshore inspection missions.

WEIGHTS

Maximum takeoff weight	11.95kg / 26.35lbs
Maximum payload weight	2.2kg / 4.85lbs

DRIVE

Motors	8 Acecore brushless motors
Propellers	18'' Carbon propellers
Flight controller	Cube (Orange / Blue)
Battery	Lithium Polymer Tattu 17000mAh

FLIGHT

Maximum flight time	26min @ 1.6kg (α7R + gimbal)
Wind resistance	35 knots / 18 m/s continuous
Operating temperatures	-15ºC to +50ºC
Maximum downfall	10mm/h 30mm/3h

682
351
125
688

1316
457
1092
1060

NOA

Electric

04

The Acecore Noa - The Ultimate, has a maximum payload lifting capacity of 20 kg. Payloads of 3kg, like the Sony A7r IV package, can be flown for over 40 minutes. Noa's excellent performance, endurance and internally stabilized quick-release make it a truly versatile workhorse. The retractable landing gear option provides a 360 degrees unobstructed FOV for all kinds of payload configurations.

The ultimate tool for perfect results.

NOA *Electric*
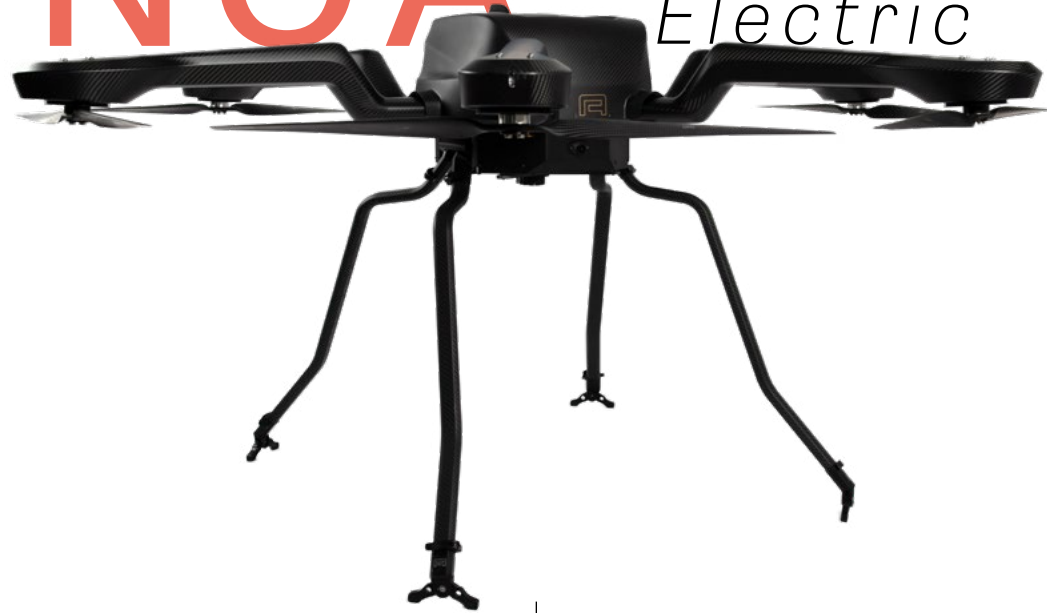
WEIGHTS

Maximum takeoff weight	< 25kg / 55lbs
	Heavylift: 36.9kg / 81.4lbs
Maximum payload weight	8.1kg / 17.9lbs
	Heavylift: 20kg / 44lbs

DRIVE

Motors	6 Acecore brushless motors
Propellers	28'' Carbon propellers
Flight controller	Cube (Orange / Blue)
Battery	Lithium Polymer Tattu 11000mAh up to 23000mAh

FLIGHT

Maximum flight time	60min
Wind resistance	28 knots / 14.4 m/s continuous
Operating temperatures	-15ºC to +50ºC
Maximum downfall	10mm/h 30mm/3h

1680
840
540
820

711
2330
1460
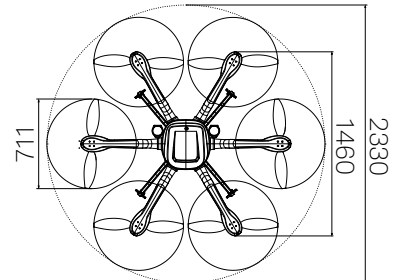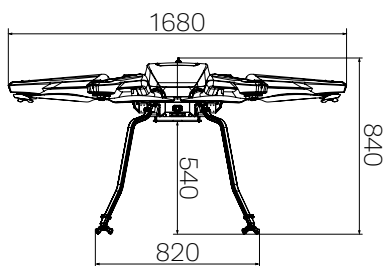
Applications

The Acecore Noa offers the widest range of applications and payload configurations within our UAV line-up. It supports today's most advanced payloads and set-ups. The Noa can be configurated precisely to your wishes so you can stand out in your field of work.

▼ YellowScan Vx20 + dual camera

LiDAR

We work closely together with YellowScan and Riegl to deliver fully integrated systems that provide the user with accurate and consistent results - giving you high-quality point clouds as a result.

◄ Riegl VUX-120

Single RAW-image from the Phase One iXM-100

Mapping & Surveying

The Phase One P3 gives you the highest resolution data currently available. This combination gives the pilot 40 minutes of real-world flight time, providing you with the opportunity to map bigger areas. The ultra-stable flight characteristics of the Noa make sure your results are of the highest possible standard.
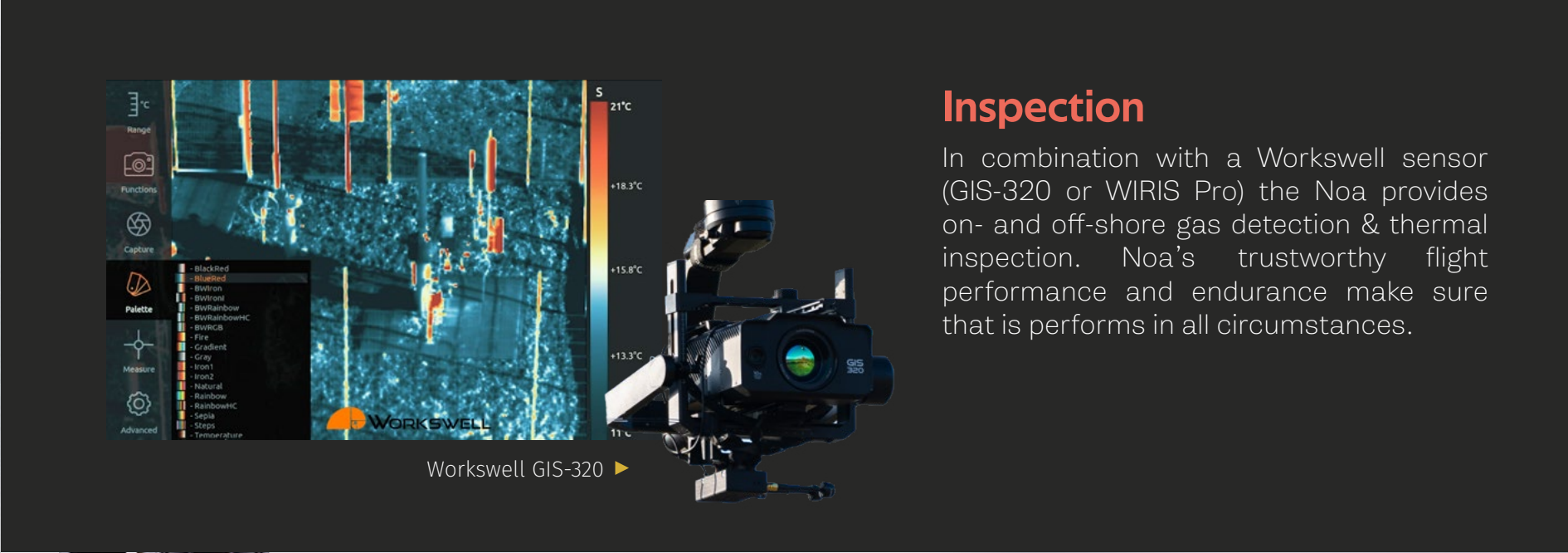
▲ Phase One P3

◀ NextVision Raptor x80

Workswell GIS-320 ▶

Inspection

In combination with a Workswell sensor (GIS-320 or WIRIS Pro) the Noa provides on- and off-shore gas detection & thermal inspection. Noa's trustworthy flight performance and endurance make sure that is performs in all circumstances.

◀ Shotover G1 gimbal with cinema camera

Security

The Noa, being the airframe that offers the longest flight time of our electric line-up, makes a perfect security solution. Combined with the NextVision Raptor X80 or Workswell Enterprise, you can detect and identify people and objects at long range. All thanks to the dual-sensor EO / IR and the micro-stabilized gimbal of these sensors.

Cinema

Combining the Noa with the SHOTOVER G1 gimbal creates the most advanced, high-end cinema rigs. This package offers industry-leading stability, 360-degree continuous pan, remote camera control, and an unobstructed view thanks to the retractable landing gear.

Meet our most persistent drone - the Noa Hybrid. The in-house developed onboard gas electric power supply results in a highly integrated powertrain. Driven by a liquid-cooled generator with a remote starter - delivering up to 4000W of continuous power to the brushless motors.

NOA

Hybrid

05

This Hybrid offers a maximum endurance of 175 or 265 minutes, depending on the fuel tank option. Charging anxiety is a thing of the past - though Noa Hybrid still features backup batteries to ensure a safe recovery. A true dependable workhorse.
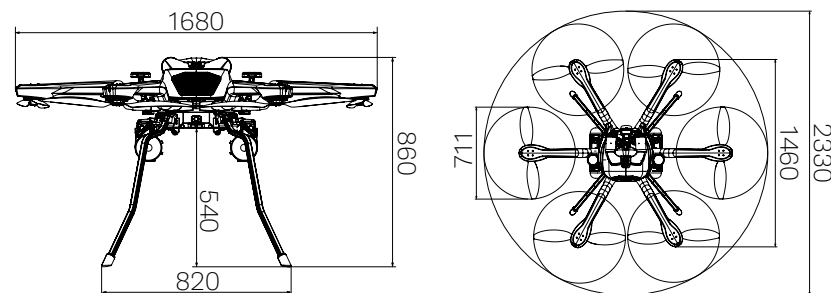
NOA

Hybrid

WEIGHTS

Maximum takeoff weight	< 25kg / 55lbs Heavylift: 31kg / 68.3lbs
Maximum payload weight	6kg / 13.2lbs (with 8L fuel tanks)

DRIVE
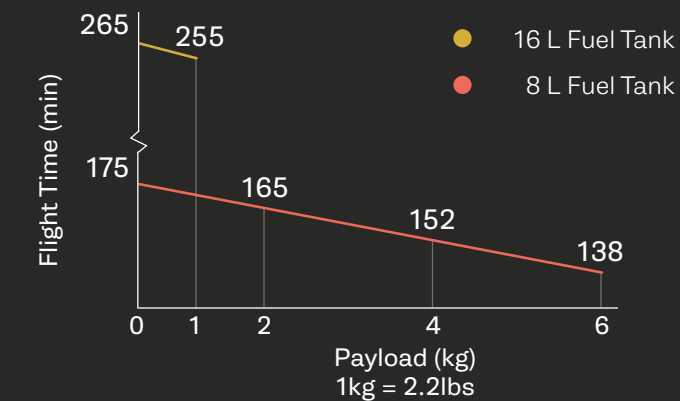
Motors	6 Acecore brushless motors
Propellers	28" Carbon propellers
Flight controller	Cube (Orange / Blue)
Battery	Lithium Polymer Tattu 10000mAh up to 17000mAh
Energy type	Electrical and gas combustion hybrid

FLIGHT

Maximum flight time	175min* *265 with fuel tank upgrade
Wind resistance	28 knots / 14.4 m/s continuous
Operating temperatures	-15ºC to +50ºC
Maximum downfall	10mm/h 30mm/3h

1680
860
540
820
711
1460
2330

Flight Time table

265
255
175
165
152
138

16 L Fuel Tank
8 L Fuel Tank

Flight Time (min)

0 1 2 4 6
Payload (kg)
1kg = 2.2lbs

Operating ceiling

3500 m

Mine Detection Drone

UMAG SOLUTIONS

A turnkey solution for mine detection.

This package gives the user a battle-proven, STANAG-compliant, weatherproof magnetic mine detection drone, capable of being deployed in any terrain - onshore or several kilometers offshore. With superior sensitivity and ease-of-use it provides an efficient tool to detect Unexploded Ordnance, land and naval mines. This solution is custom-tailored to the specific requirements of military, NGO, and commercial clients.
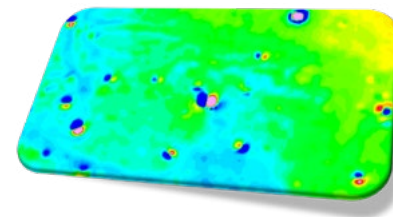

V2Mag™ Payload

UMAG's top-of-the-line patented drone magnetic mine detection payload. With a world-record low noise level of 0.01 nT, cm-level accuracy, Optically Pumped true gradiometry setup, rugged design, and years of commercial and military onshore and offshore validation, the V2Mag™ is the most trusted and sensitive drone magnetic mine detection technology on the market.

Real-time map visualization

NOA *Electric*

35 minutes

NOA *Hybrid*

Flight time with V2Mag™ payload

120 minutes

Technical Specifications
Applies to both Noa Electric and Hybrid

DATALINKS
Video (Noa)	NATO STANAG compliant
Flight controller	Cube (Orange / Blue)
Redundancy	Dual configurable frequency
Encryption	AES256 encrypted

DATA
Positioning	Real-time Terrastar-enabled GNSS-IMU (5-15 cm accuracy in XYZ)
System Noise	0.01 nanoTesla in raw unfiltered data during flight
Processing	Automatic real-time map visualization and software-assisted UXO / mine target analysis for XYZ and Magnetic Moment parameters

FLIGHT
Wind resistance	12 m/s gusts & 8 m/s continuous
Operating temps	-15ºC to +40ºC
Maximum downfall	10 mm/h

UXO / MINE DETECTION RANGE EXAMPLES
|	
25kg / 50kg ferrous objects	7-10m / 10-15m
Naval Mine (e.g., MK6)	10-15m (distance to mine floating in water column)
Aircraft Bomb (e.g., MK82)	10-12m
155mm Grenade	7-10m
AT Mines (e.g., TM-62M)	5-7m
AP Mines (e.g., MON-50, POM-2)	2m
AP Mines (e.g., OZM-3)	3-4m
AP Mines (e.g., PMN)	1-2m
Cluster Munition (e.g., AOKh)	1-2m

Controllers

At Acecore we believe that the quality of the controller is just as important as the UAV. As end-users, we know what's important in a controller. It needs to be tough, user-friendly, and most importantly; the battery needs to last.

Herelink George
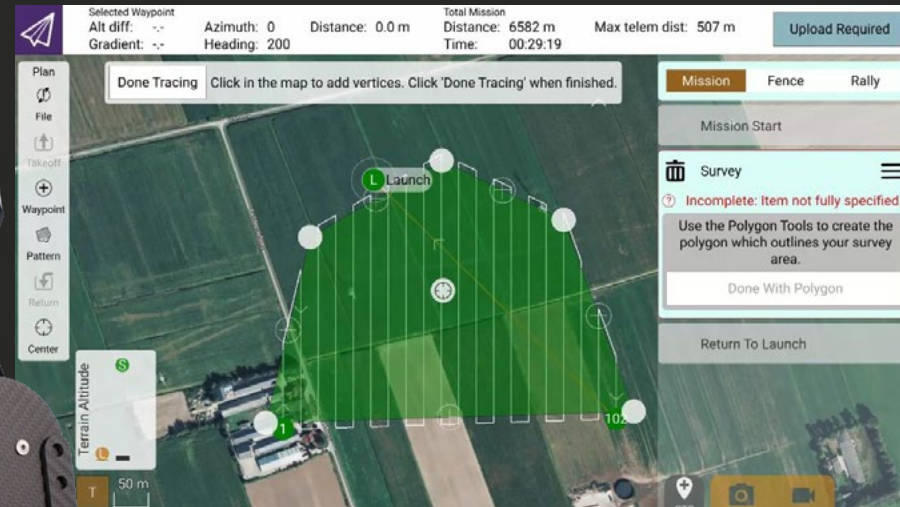
The George remote control holder is a drone ground control station featuring enhanced battery life and designed for the needs of mapping and surveying as well as security and emergency response drone pilots. Constructed from true carbon fiber for a lightweight yet strong construction, the George Herelink can last for several flights without needing a charge.

The system can work with an optional integrated and detachable Surface Go tablet with pre-installed mission planner software, providing simple single-operator workflows. Users can easily generate flight paths for autonomous mapping flights and seamlessly switch between FPV footage and payload camera footage on the same device. Both video feed and drone control have a range of up to 16 km.

- AES128 data encryption
- All-in-one datalink
- Flight planning
- Up to 16km range
- On-board battery
- Tough & lightweight
- True carbon fiber
- Optional tablet add-on

- Configurable datalink
- STANAG 4609 video stream
- Drop, dust & water resistant (IP65)
- Hot-swappable battery
- 8GB RAM

MIL-STD-810G

Signav Ultra

The proprietary and radio-agnostic Signav Ultra is built on top of the Panasonic FZ-M1 to be a military-grade ground station. Its radio is configurable from the factory to fit in existing (military) networks or selected frequency bands, while the button layout is carefully selected to work with a range of high-end ISR sensors including the NextVision Raptor X80.

Radio options include **Doodle Labs Smart Radio**, **Silvus Technologies** and **Persistent Systems MPU5**.

Radio options

Doodle Labs	900 + 1626 - 2510 + 5800 MHz
Silvus	900 - 928 + 1350 - 5975 MHz
MPU5	1350 - 6000 MHz

Specifications for all radio options:

- S and L band available
- Mesh network available
- Frequency hopping

- All-in-one datalink
- Dual operator
- 15km data range
- Dust- and waterproof
- 1000 nits display

Dual Operator Setup

If the inspection job is too complex for the pilot to also control the payload, this master/slave controller combination offers the ability to add a second remote. The dedicated camera operator gets their own 1000cd/m2 high brightness display and takes full control over the payload to reveal all details. Each smart controller is IP53 with a dedicated HDMI-out to output live video stream.

FrSky George

FrSky with our George remote holder is a modular base station that allows drone pilots to expand the functionality of the standard FrSky controllers, with up to three FPV displays or other modules. Capable of powering the controller and attachments through multiple flights, George provides a highly convenient way to control the drone and its payloads from one setup. FrSky George provides an ideal way to smoothly transition from piloting to camera / payload operation.

- Standard Remote option
- Configurable system
- Dual or single operator
- 500m / 5km data range
- On-board battery
- Tough & lightweight
- True carbon fiber
- Optional GS casing

Ground Station Pro (GSP)

Inside the rugged casing of the GSP, there is an ultra-bright 15'' monitor, which can be used in bright sunlight and will provide the pilot or camera operator with the screen real estate he needs.

Using the provided carbon fiber tripod, the Ground Station Pro can be set at any desired height up to 1.80m. Thanks to its rugged shell and bright large monitor, the GSP is well suited for security, emergency response, and live inspection missions.

- Dual or single operator
- 500m / 5km data range
- On-board battery
- 15'' 2000 nits monitor
- Light rain resistant
- True carbon fiber plating

Services

07

At Acecore we value customer satisfaction. That's why we provide you with numerous services to make purchasing and owning an Acecore drone the best experience possible.

Custom configurations

We offer the possibility for custom configurations that fulfill all your wishes. Custom onboard modules, computing, antennas, - anything. These can be commercial or military-spec drones. We do all the integrations in-house so that you can rely on a functional and reliable result.
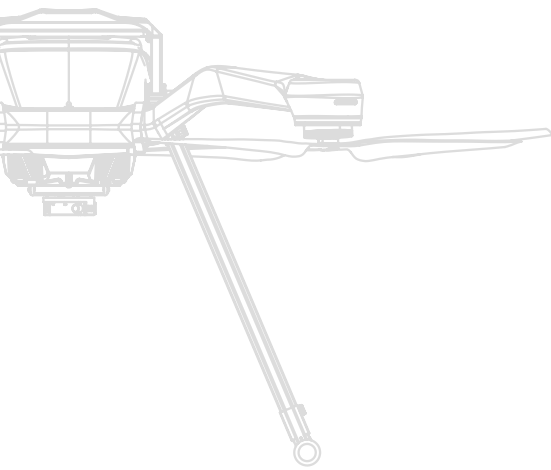
Custom integrations

Have a custom payload that you want us to integrate into one of our UAVs? No problem, we do that too. Since we do all our integrations in-house it's possible to integrate your specific payload to work seamlessly with one of our systems.

Up to you! ▲

Maintenance

We build our drones to last. They can deal with the harshest environments and complete the toughest missions. To make sure they can keep doing so, for as long as possible, the right maintenance is important. That's why we offer standardized maintenance plans for all our customers.

Our distributors and authorized maintenance providers cover the whole world to make sure your Acecore drone will never have to stay on the ground for long.

Training

We offer on-site training. This way, we allow all future Acecore pilots to get the most promising start they could desire. The training has a priority for preparing the pilots for lots of scenarios to ensure the pilots can take on any mission. Of course, the training also includes theoretical training to make sure they get the most out of your Acecore UAV.

Training includes theoretical training, setup, manual flight, automatic flight, and general best practices.
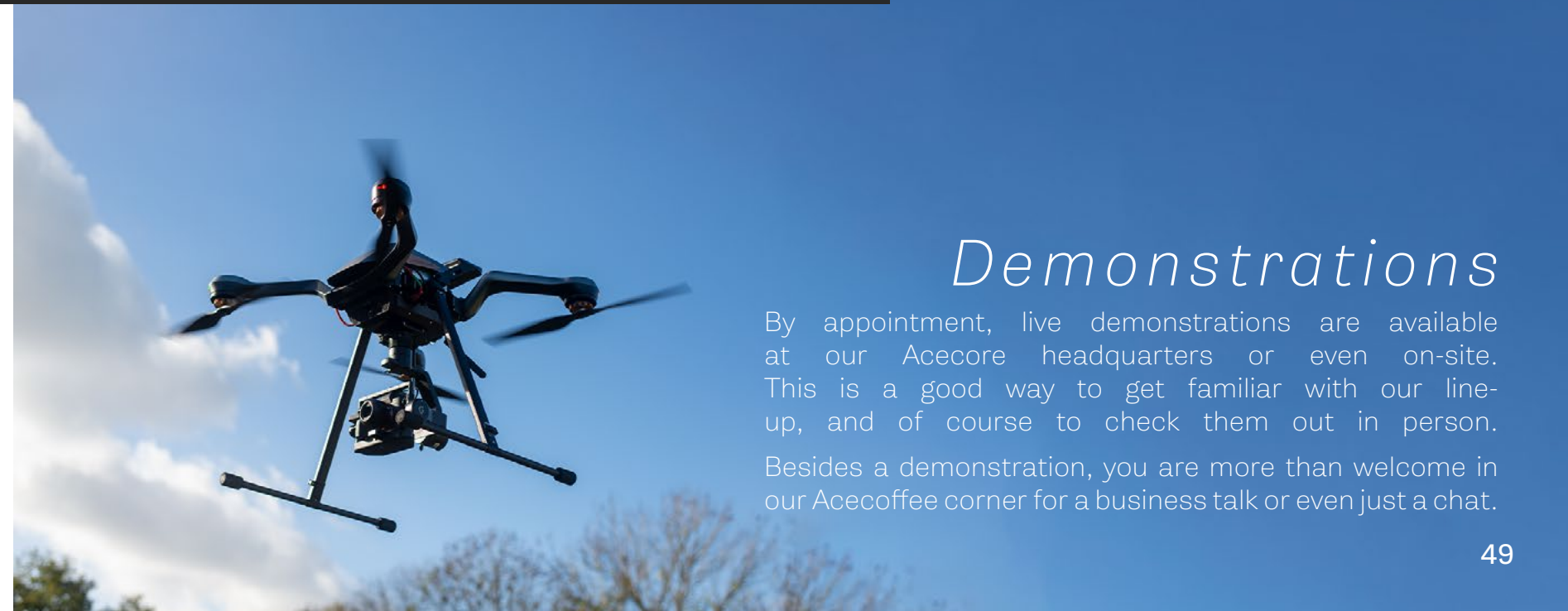
Demonstrations

By appointment, live demonstrations are available at our Acecore headquarters or even on-site. This is a good way to get familiar with our line-up, and of course to check them out in person.

Besides a demonstration, you are more than welcome in our Acecoffee corner for a business talk or even just a chat.

Branding

All of our UAVs are configurable with custom branding options. We offer the option for any Pantone color, professionally applied by one of our partners. A glossy finish, or maybe a satin matte finish? All up to you. Your company logos can also be displayed proudly on your new UAV. Even a custom LED configuration is possible. Everything to make sure that you will be looking your best.

A docking station for industrial plants. HIVE integrates existing drone platforms into a fully autonomous drone hangar, with a launch time of only 3 minutes.

Custom OEM

At Acecore we believe in working together. Serving as an OEM - we provide for long-term partnerships and development opportunities. Through our developer program, Acecore offers OEM solutions as a tailor-made platform with your custom product as an integral part of the system. Meaning you are able to integrate your product into a fully working package. Creating a branded, out-of-the-box, fully integrated end-solution for your customers.