AeDrone

High resolution

AeDrone is a high performance LiDAR and photogrammetric equipment.

Light and compact

It is a solid system, light and compact.

Power consumption

The whole system has a low power consumption, more than 1 hour of autonomy.

Configuration

It allows to control up to 2 cameras: RGB, NIR, thermal, multispectral, 360º.

Centralized control

Easy to manage through a web application for mobile, tablet or PC.

Versatility

Its design lets a wide range of set-ups, several drone models, vehicles and backpacks.

"AeDrone is a compact and multifunctional system to carry out your projects"

AEROLASER
ADVANCED LIDAR TECHNOLOGIES

AeDrone

AeDrone is a high performance LiDAR and photogrammetric equipment, that allows us to carry out geospatial services worldwide, obtaining excellent results.

Thanks to the versatility of the developments, AeDrone lets us set it up in different configurations, depending on the requirements of the projects. We adapt our system to achieve all the technical requirements of the project. As well, the solid design, lightweight and its small size makes this system a multifunctional for aerial missions and mobile mapping in differentent vehicles and backpacks.

The system is configured by a laser scanner, one inertial control unit (AeCU), formed by a GNSS and IMU. It also has one PC, AePC, that controls the whole system in an easy and efficient way.
Through a web application, using a wifi conection, it is possible:

- Control, manage and configure all sensors during data acquisition.
- Check IMU, gps, laser status.
- Check batery level.
- Verify available/used storage capacity.
- Switch on/off the system.

In addition, the system allows to install a set of 2 cameras, RGB, NIR, thermal, multispectral, 360º. The software syncs and trigger the camera letting the user to configure it. All data can be stored on an external USB.

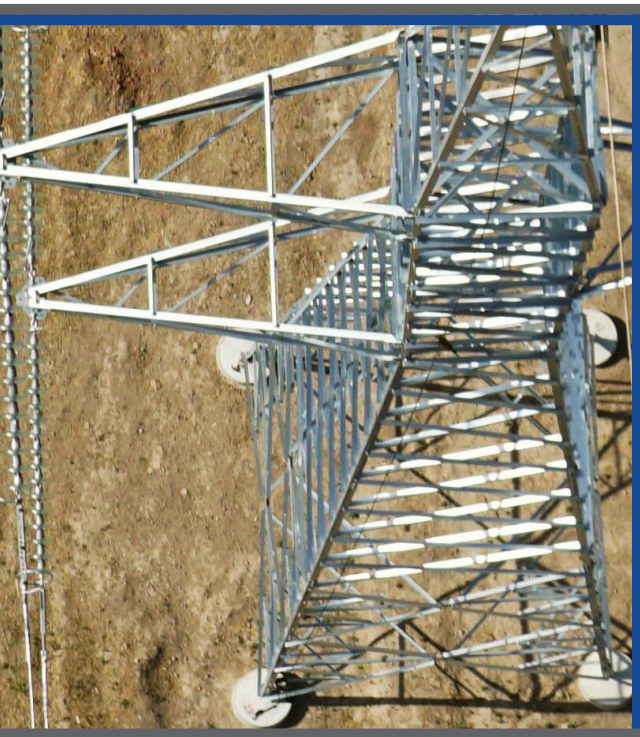
- All the acquired data are stored in a well organized, effective, easy and practical structure, which minimizes the post-processing job in the office.
- Storage: external USB
- Data is stored in folders by sensors. As well, each sensor save data by flight dates, sessions, flight lines. The flight lines are saved in .shp files.
- System weight from:

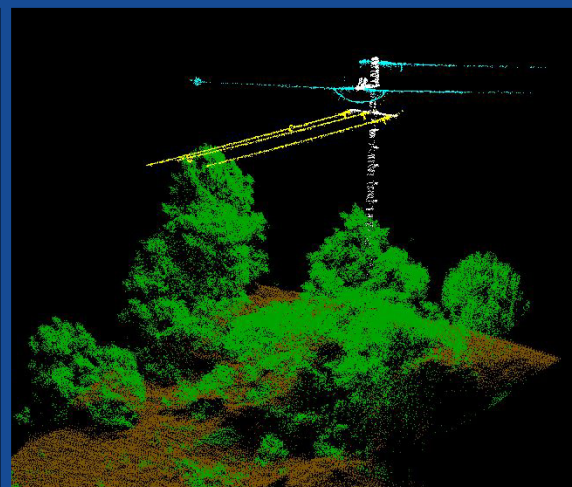
  - 1,5 Kg

DIFFERENT
LASER SENSORS
ARE SELECTABLE
FOR THE DRONE
CONFIGURATION

Technical data

EQUIPMENT	BRAND AND MODEL	
Laser scanner	Velodyne Puck Lite Livox Mid-40 Livox Avia	
IMU (Inertial Measurement Unit)	Sensonor STIM300,	±400deg/sec, 5g
Digital cameras	Sony alpha a6000, Sony alpha 7R mark iv	24 mpx 61 mpx
GNSS	Trimble BD940	
GNSS Antenna	Maxtena M1227HCT-A2-SMA Maxtena M8HCT-A-SMA	
Synchronization and power unit	AeCU_Drone	
PC	Rockchip RK3399, Dual-Core Cortex-A72 + Quad-Core Cortex-A53	
Software	AeDrone	
* Other sensor models could be integrated under customer request.		





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