

FILMINGPHOTOSURVEY
Multi-role solution for Hi-resolution photo, video and survey

THERMALRGBINSPECTION
Acquisition of thermal, radiometric and visible high resolution data

PRECISIONFARMING
Acquisition of multi-spectral, thermal, radiometric and visible high resolution data

AERIAL3DPOINTCLOUD
Quick output for high-density point cloud



WWW.ITALDRON.COM



"BIGONE 8HSE", the UAV entirely designed and built in Italy, is the ideal solution for anyone looking for high flight endurance, versatility, heavy payload capacity and unique safety standards in its category.

SAFE & REDUNDANT

Fault tolerance guaranteed by double electronics and sensors
automatic safety parachute

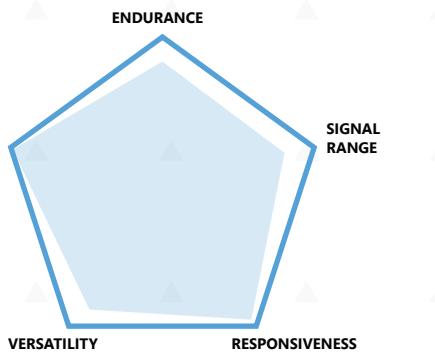


TRANSPORTABLE

Easy folding arms and
ready to fly

VERY POWERFUL

Up to 10 Kg of payload



Fully operational
in 8 minutes



Compact and versatile
platform, customizable
for different applica-
tions



Survey grid with
geotag integrated tools



Certified by ENAC
regulations. A flight
manual is provided



Fast tech-support



Proven platform on
flying training
courses

UAV

- Eight high efficiency brushless motors and carbon propellers.
- Fast folding arms, carbon fiber frame for easy transport.
- Standard equipment automatic safety parachute.
- Redundant auto pilot provided with internal inertial platform, GPS, barometer, Data link equipped with:
 - RTTH (return to home) with auto landing, auto take-off and position hold functions.
 - GPS Waypoints configuration for autonomous flight missions.
 - Flight planning software to perform "grid and survey" missions for georeferenced aerial photogrammetry.
 - Geo-fencing, escorting from device.
 - Telemetric Data link for flight information and remote control.
 - Flight mission recording stored on memory card.

CONTROL SYSTEMS

- Radio control transmitter with manual and assisted mode.
- Rugged ground station to set up the autonomous flight, image preview and OSD information. Hi-capacity battery and long range data-link grant continuous and simplified workflow.

FLIGHT PLANNING THROUGH PROPRIETARY APP CONTROLLER

Intuitive and efficient flight planning software developed by Italdron with remote shutter tools optimized for aerial photogrammetry and other applications.

Planning software for PC and Android devices with customizable mission parameters.

Possibility to add plug-in for future functionalities and applications.

PAYLOADS



MULTI-ROLE PHOTO-VIDEO

A stabilized, brushless 3 axis gimbal with encoder, featuring 360° rotational movement and optimised for the following types of use: stable, fluid, high performance 4K video recording, high-resolution 42mpx photogrammetric imaging, horizontal and vertical, up-close visual inspections with 42mpx still imaging or 4K video.

Thanks to the remote imaging and recording function, together with the live preview feature (including HD) and the capacity to support a variety of lens combinations, it proves to be an excellent instrument for those looking for a complete, effective solution capable of high-quality construction.



THERMAL MULTI-SENSOR

A payload optimised for top-flight thermographic / visible surveying. Stabilised, equipped with remote-controlled imaging and movement, outfitted with a thermal sensor that is also radiometric, it supports the FLIR VUE PRO product line, providing thermal imaging able to probe every pixel's worth of terrain.

Ideal for surveying designed to assess energy efficiency or identify instances of energy dispersion, as well as in all applications where thermal and visible output need to be combined (inspections of energy and industrial plants, power-lines, plus search and rescue operations and surveillance activities).

Combined with a full-HD, 16-megapixel visible sensor, it is able to simultaneously observe and collect various types of data for different purposes.



AGRO MULTI-SENSOR

A payload optimised for precision agricultural surveying. Stabilised, with remote-controlled imaging and movement, it carries a built-in set of 3 sensors in 1, offering top-flight data-acquisition performance with the advantage that all the results would be affected by variations in the moment in time and in weather conditions: exposure to the sun, level of humidity, temperature etc... An IR radiometric thermal images by probing every pixel's worth of terrain.

The multispectral NIR is a multi-band, global shutter sensor capable of gauging the index of foliage health (NDVI).

With its 16 megapixel / HD capacity, the resulting resolution offers (apart from real-time output) the imaging needed to construct solid 3D models of the terrain.

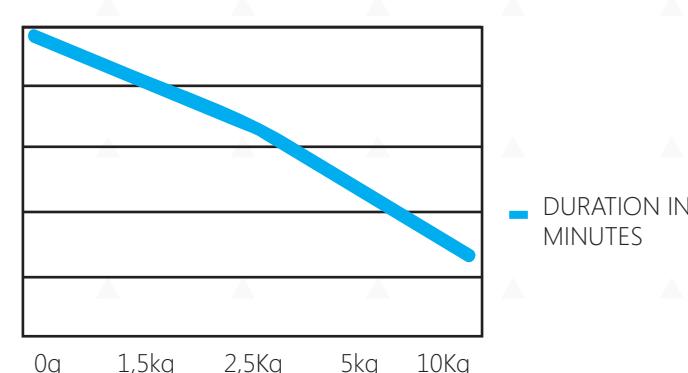


LIDAR

Lidar is optimal for rapid output for high-density point clouds. It is the ideal solution for complex surveying (industrial plants, power lines) or operations in areas partially covered by vegetation.

The LIDAR system consists of a Velodyne VLP 16 LITE laser sensor, imu, highly accurate ISS GNSS and a built-in glonas, double-antenna GPS RTK mounted on the UAV with a cushioning ball-bearing assembly. Reduced weight and size are made possible by the single power source supplied by the UAV.

FLIGHT TIME RELATED TO PAYLOAD



The information contained in this catalog is purely indicative and subject to changes.