DRONELAB
UNMANNED SYSTEMS

DUAL-SLIDE
MULTI PAYLOAD
ATTACHMENT

8 KG
MAX PAYLOAD
WEIGHT

+ 50 Min. 2Kg
PAYLOAD
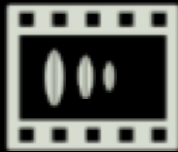
SKYQUBE V2

The Drone Without Compromises

ACHIEVE THE IMPOSSIBLE

Dual Slide Bar system to accommodate special equipment; LiDAR, CO2 sensors, fine dust sensor, fumes, electro smog, GeoRadar or any Custom Payload.

Guaranteed autonomy of over 50 minutes of flight, with 2 kg of Payload.

Dual channel FullHD video streaming with a range of 12Km (CE) or 20Km (FCC) in Real-Time (without latency).

Lidar sensors for Proximity (360° anti-collision). Altitude Lidar sensor. Integration of altitude accuracy with Laser System.

Warranty on malfunctions due to electronic components and structure. Guaranteed after-sales service.

IP 55 rating.

Empty weight including batteries: 9.6 kg.
Maximum Payload capacity: 8 kg.

VERSATILE AND SUITABLE FOR ANY OPERATION

READY TO FLY IN 2 MINUTES

STURDY AND EASY TO CARRY

SIYI MK15E SMART CONTROLLER

MK15E is a long-range Android smart controller with dual 1080p FPV, based on the full high-definition image transmission technology developed by SIYI Technology. The system is deeply optimized and integrated with Qualcomm 8-core CPU platform. MK15E's abundant features and powerful performance make it a reliable image transmission and solid control device for drones and unmanned vehicles for any application.

Long Range 1080p Image Transmission

Qualcomm Snapdragon 8-Core CPU

Android 9.0

Transmitter HDMI Output

IP53 Transmitter

LONG Range

H.264 H.265
1080P 60FPS Hardware Decoding

Secondary Controller

1080P
Two-Way HD Digital Image Transmission

4G

3.5H PD Fast Charging

12H Battery Life

180ms Low Latency

1080P HD Screen

1000 cd/m2 High Brightness

IMAGE RECOGNITION AND SENSOR DATA AI MODULE

With the additional AI module, the software algorithms can combine and interpret data from the drone's sensors, allowing SkyQUBE to interpret the surrounding environment, identify obstacles, recognize objects and analyze complex scenarios, counting and recognizing people and animals.

Identification of heat sources, control of the use of personal protective equipment by staff. Smoke and fire detection; vehicle plates reading and tracking; identification of damage and breakages on surfaces... many advanced functions thanks to an incredible computing power.

Control for BVLOS flights is simpler and more intuitive with augmented reality. Thanks to AR viewers and AirHUD software you can check position, telemetry and FPV data directly on the viewer, allowing you to raise the level of situational awareness.

Drone pilots know very well that at distances greater than 200m it becomes difficult, if not impossible, to see and control the drone directly. With AirHUD Head Up display the pilot can control the drone safely even at long distances or in BVLOS. Augmented reality increases situational awareness, giving pilots unprecedented control of the UAV.

SATELLITE COMMUNICATION MODULE

Optional Connectivity solutionfor for remote areas

KEY FEATURES

- Hybrid communications: satellite and terrestrial (LTE, Wi- Fi, BT, LoRa)
- Iridium Certus® 100
- Iridium Certus™ 9770 -Transceiver
- IP connectivity Cloud infrastructure and user portal
- Accurate tracking (GNSS) API (Application
- Programming Interface) for 3rd party apps

DroneLab

Perfectly matches the service requirements for IoT/M2M applications, providing a flexible connectivity at low latency.

The engineered design guarantees a high availability and reliable communication channel through the usage of the Iridium® satellite constellation and multiple terrestrial networks (LTE, LoRaWAN, Wi-Fi and Bluetooth).

Dual frequency and multi constellation GNSS receiver to augment the position accuracy and provide advanced Geopositioning services.

DRONELAB UNMANNED SYSTEMS

Powered by Auterion

- Cloud connectivity

Automated, real-time data transfer from the field to the cloud and centralized fleet data monitoring.

- Real time 5G connection and Artificial Intelligence (AI) integration

- Compliance made easy

Download compliance reports at any time with per pilot or per vehicle data from the cloud. Prepare drone missions with pre-flight planning checklists, see no-fly zones near your operations, and check real-time traffic information.

- Smart Fleet management

Manage your diverse fleet of vehicles in a single asset management system that handles all software updates, tracks every drone for predictive maintenance, and monitors every component to flag when you need a replacement.

- NDAA compliant, open system standards

- Access data in real-time

Transfer images and videos to the cloud mid-flight. Produce and analyze thousands of data points, in different formats (orthomosaic, point cloud, DTM, DSM, contour lines, etc) and have them all in one place with automated image geotagging.

- Fully integrated system

- Pre-plan your job workflows

Transfer mission details from the office to the field Review mapping data from the office in real-time.

- Unified workflows

Manage drones, batteries, and pilots in one place. Review flights in the cloud for KPI tracking and performance optimization. Integrate data into a single process no matter which vehicles have been flown.

COMPATIBLE PARTNER SOFTWARE SUITE

PangeaCloud, SkyBrowse - PIX4Dcapture - PIX4Dinspect - PIX4Dcloud PIX4Dreact - PIX4Dsurvey – DroneSense - DroneLogbook Survae - Solex CC – UGCS – Litchi - Mission PlanneQrGroundControl - Drone Deploy and a lot more.

Dual Slide Bar for multiple Payloads

For those complex operations with different equipment to integrate, you can configure **SkyQUBE** with multiple Payloads.

With **SkyQUBE** you can manage multiple jobs within a single mission, minimizing cost and time.

Carbon GIMBAL with high torque brushless motors, configured according to the Payload and loading up to 8 kg, to give maximum stability and reliability.

SkyQUBE can host a wide variety of payloads for each type of operation. From photogrammetry to more complex functions, such as the integration of a robotic arm, electromagnetic sensors, environmental sensors, or freight transport.

Ask **DroneLab Unmanned Systems** to integrate the right sensor for your specific operations.
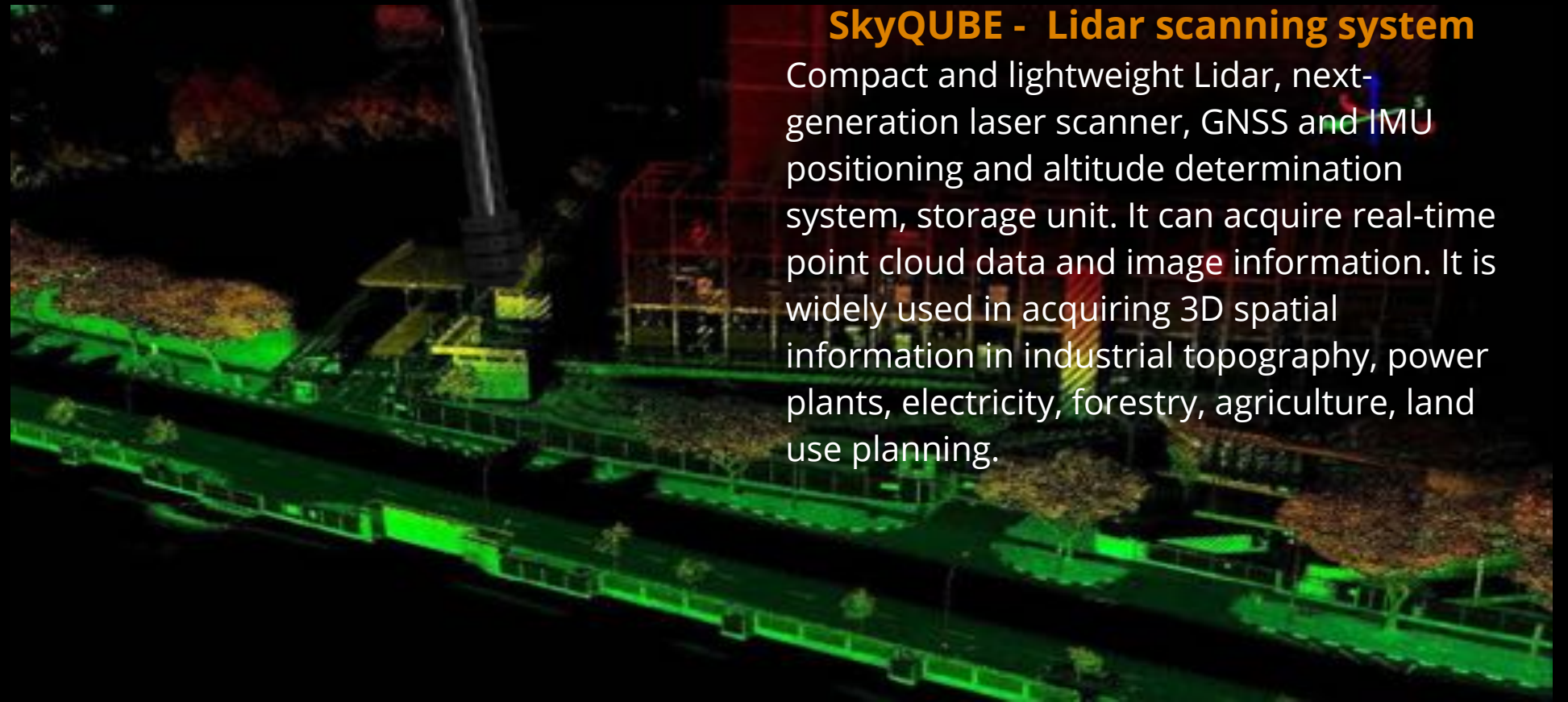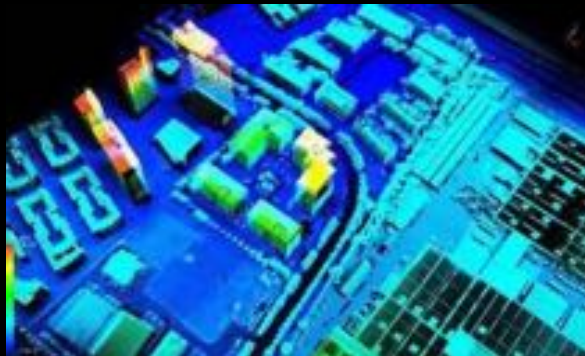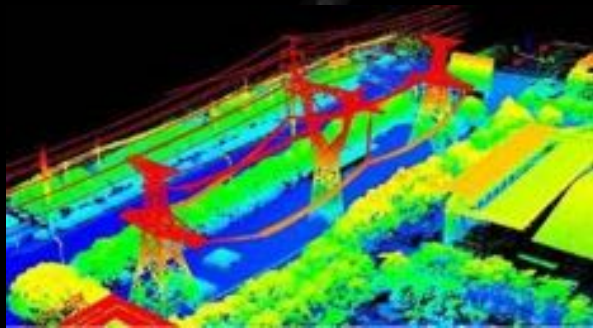
SKYQUBE - LIDAR

SkyQUBE - Lidar scanning system

Compact and lightweight Lidar, next-generation laser scanner, GNSS and IMU positioning and altitude determination system, storage unit. It can acquire real-time point cloud data and image information. It is widely used in acquiring 3D spatial information in industrial topography, power plants, electricity, forestry, agriculture, land use planning.

Why DroneLab Unmanned Systems:

- Open PX4 system to adapt SkyQUBE to your specific needs. Design, Engineering, Test, Production, Support Team located in Italy.

- Assistance and resolution of operational problems in a transparent and collaborative manner.

- Specific training program for your type of operations.

Customization: SkyQUBE can be configured to meet unique and specific needs. We know how to make your drone fly with maximum efficiency and safety, for out-of-the-ordinary operations.

Reconfiguration: When you need to fly your SkyQUBE in new scenarios or to configure it with different Payloads, we offer the support of our technicians to always guarantee high performance.

PERFORMANCE	SkyQUBE V2
Dimensions when closed	740x570x500 mm
Diagonal dimensions in flight line	1380 mm
Empty weight (without batteries)	6,5 kg
Maximum take-off weight	8 kg
Maximum Payload weight	19,5 kg
Remote control	SIYI
Data transmission frequencies	H2.5 GHz
IP Protection	IP 55
Precision in hovering	0,10 mt
Maximum speed in horizontal flight	28 m/s
Maximum uphill speed	6 m/s
Maximum downhill speed	7 m/s
Maximum operating altitude	5000 mt
Maximum data transmission distance	15 km (CE) or 20 km (FCC) in Real-Time (without latency)

FEATURES	SkyQUBE V2
Motors	Very high resistance, double bearings, dustproof IP55
Frame	Carbon, Alutex and Avional
Supported Gimbals	Gremsy (all)
FPV Cockpit Camera	HD selectable from the remote control
Video streaming	Native RTSP
Remote control (GCS)	SIYI Features (Software, Battery, Antenna Autonomy, Outputs...)
Batteries	2 high density Li-Po batteries
Position accuracy increase system	RTK
Obstacle sensing	Characteristics and precision
USB Ports	Service
Charging station	Dual Channel - 1080W
Transport case	Polypropylene IP67
Flight terminator	Optional
Parachute	Optional

DroneLab Unmanned Systems is a DroneLab brand