KOLIDA

SkyWalker X63 series

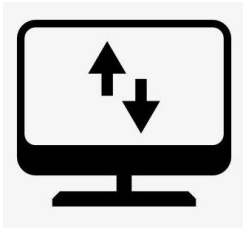
A Multi-rotor UAV Ready for Industrial Applications

- *redundant flight control for safety assurance*
- *multiple payload options for diverse needs*
- *survey-oriented flight plans available*

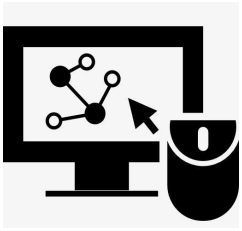
Payload capacity and flight endurance are the 2 major topics of interest among multi-rotor UAV users. SkyWalker X63 series was designed to satisfy both and challenge a number of industrial applications like 3D modeling, topography, forestry research, power lines management, disaster analysis, immediate response, geology & forensic, etc.

WORKFLOW

Data Capture



Initial Process

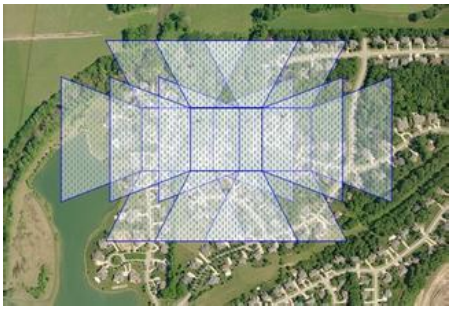


Mapping/Modeling

PAYLOAD

RGB camera

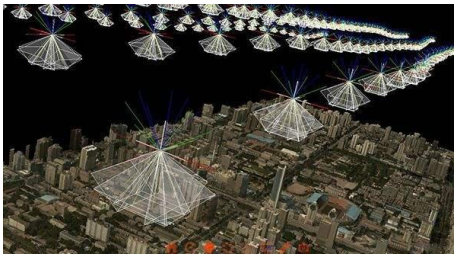
integrated 5-lens camera system



data acquisition in 5-lens mode

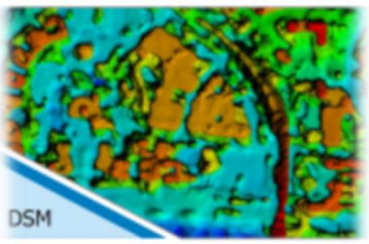
wireless video transmitter

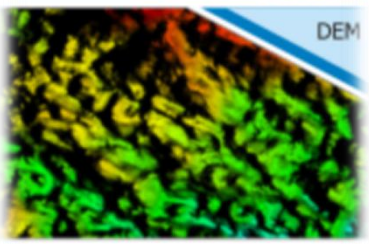
infra-red thermal imager

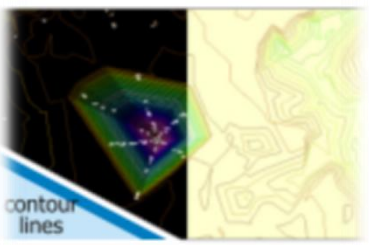


SKYSOLUTIONS

www.kolidainstrument.com







SPECIFICATION

Series:	SkyWalker X63
Model:	X63 (standard); X63-PPK
Aircraft Type:	hexacopter, 6-rotary wings
Dimension:	121 x 121 x 40 cm
Empty Weight:	4.1 kg (X63); 4.5 kg (X63-PPK)
Body Material:	carbon fiber reinforced polymer
Propulsion System:	electric pusher propeller
Flight Control:	3 systems available, redundancy design
Electric Motor:	6 brushless motors
Power Supply:	Lithium-polymer battery, 12S, 16500mAh, 22.2V
Gimbal:	slide-rail fitting
Accelerometer:	6x, for speed control
Barometer:	1x, for calculation of altitude
Magnetometer:	2x, for magnetic heading
Gyroscope:	2x, stabilizing for center of gravity shifts
GPS Receiver:	2x, for spatial positioning and waypoint navigation
GPS Tracker	1x, for detecting the drone location in real time
PPK Receiver:	SkyLines-mini, L1/L2 GNSS (GPS/Glonass/Beidou, Galileo ready)
Baud Rate:	data refresh 5/20/50 Hz optional
Control Mode:	remote control/auto-pilot
Operating Temperature:	-20℃ ~ 50℃
Environment Humidity:	90% condensing
Radio Datalink:	Frequency Hopping Spread Spectrum (FHSS)
Control Frequency:	900 MHz
Transmitting Power:	1 w
Communication Range:	5 km (normal); 10-16 km (best, upon upgrade)
Take-off & Recovery:	vertical take-off and landing (VTOL)
Weather Limit:	stable in winds up to 10 m/s (36 km/h), Beaufort scale 6
Hover Accuracy:	H. ±1 m; V. ±0.5 m
Skyway Control:	< 1 m
Flight Endurance:	60 mins (w/o payload); ≥50 mins (with 5-lens camera)
Cruising Speed:	8-14 m/s
Climbing Speed:	4 m/s max.
Maximum Ceiling:	4500 m above sea level
Working Height:	below 800 m