

Kryptton®



**KRYPTTON MEGA V8 III UAV
MAPPING DRONE**

Kryptton Mapping Drone

Kryptton Mapping Unmanned Aerial Vehicle

1:500 high precision multi-data acquisition system



MEGA-V8 III UAV

Kryptton Mapping Drone Dual Version

FEATURE & PARAMETERS



Positioning Accuracy

Horizontal : $\pm 0.02\text{m}$
Vertical: $\pm 0.05\text{m}$



Working Time

Equipped with tilting five cameras 1.65kg \leq 55min



Recharge Mileage

Equipped with tilting five cameras 1.65kg - 29km.

Dimensions	840mmx990mmx580mm	Intelligent flight	Imitation flight Pointing flight Pointing task Breakpoint continuous flight AB point takeoff and landing One button takeoff and landing One button return route Route planning Multitasking management
Aircraft wheelbase	1050mm	Safety Protection	Anti-magnetic interference, redundancy protection, low power return, lost connection, back-off protection
Body material	Japan T800 carbon fiber + German aviation aluminum	Disassembly time	Machine-free 60 seconds tool-free disassembly
Power Battery	Li-po Smart battery	Satellite positioning	Beidou, GPS, GLONASS; RTK Samsung Seven Frequency
Flight speed	$\leq 18\text{m/s}$	Wind Resistance	7
Working time	$\leq 55\text{min}$ (Equipped with tilting five cameras 1.65kg)	Positioning accuracy	$\pm 2\text{ cm}$ horizontal $\pm 5\text{ cm}$ vertical
Recharge Mileage	$\leq 29\text{km}$ (Equipped with tilting five cameras 1.65kg)	Rainproof level	Medium rain
Flight Altitude	$\leq 5800\text{ m}$	Protection	IP6X
Flying Radius	$\leq 14.4\text{ km}$	Operating Temperature	$-40\text{ }^{\circ}\text{C}$ to $+125\text{ }^{\circ}\text{C}$
Max. Load	3kg		

KRYPTTON UAV MAPPING MODULE

The Main Parameters



GSD (CM)	Elevation (M)	Working area (Km ²) Heading overlap: 75%, side overlap: 70%	Heading interval (M)	Side spacing (M)
1	55	0.522	13.3	23.9
1.5	83	0.778	19.9	35.8
2	111	1.043	26.5	47.7
3	166	1.568	39.8	71.6
4	222	2.010	53	95.4
5	277	2.501	66.3	119.3

KRYPTTON YT-5POPC IV



Sensor
5



Resolution
7952x5304



Default Focal Length
35mm



Total Pixel
1.92 a hundred million



Storage Capacity
640G



Module Weight
2.00kg

KRYPTTON TILT FIVE CAMERA MODULE RX1 VERSION

The Main Parameters



Work Efficiency

GSD (CM)	Elevation (M)	Working area (Km ²) Heading overlap: 75%, side overlap: 70%	Heading interval (M)	Side spacing (M)
1	61	0.402	9	17
1.5	95	0.575	14	26
2	127	0.832	19	35
3	191	1.203	29	52
4	255	1.636	39	71
5	319	1.965	49	89

KRYPTTON YT-5POPC III



Sensor
5



Resolution
6000x4000



Default Focal Length
35mm



Total Pixel
1.20 a hundred million



Storage Capacity
320G



Module Weight
1.65kg

KRYPTTON UAV MAPPING MODULE

The Main Parameters



KRYPTTON YT-RX1

GSD (CM)	Elevation (M)	Working area (Km ²) Heading overlap: 75%, side overlap: 70%	Heading interval (M)	Side spacing (M)
1	77	0.604	13	23
1.5	116	0.906	19	35
2	155	1.186	26	47
3	232	1.773	39	71
4	310	2.404	53	95
5	387	2.950	66	119



Sensor
1



Resolution
7952x5304



Default Focal Length
35mm



Total Pixel
424 a ten thousand



Storage Capacity
128G



Module Weight
1.2kg

KRYPTTON POSITIVE PHOTOGRAMMETRY MODULE

The Main Parameters



KRYPTTON YT-H300

H300 Laser Mapping Module

Maximum field of view	360°, self-adjustable
Maximum pulse emission frequency	100 kHz, self-adjustable
Ranging accuracy	15 mm (@150 m)
Ranging repeatability accuracy	10 mm (@150 m)
Maximum ranging range	250 m@60% reflectivity target 150 m@20% reflectivity target
Recommended operational altitude AGL	100 meters (@50kHz 100% laser power)
Laser level	1 Class human eye safety laser
Data storage	32G
Weight	1.71kg

Work Efficiency

Single flight time	45 min
Single flight area	1.12 square kilometers @150m hang high
Get point cloud density	40 points / square meter

KRYPTTON MAPPING UAV APPLICATION CASE

City Planning and Design Institute 1:500 cadastral topographic survey project

The HVA mapping drone MEGA platform is equipped with a tilting five camera for aerial surveying.



Range of measurement



3D model diagram

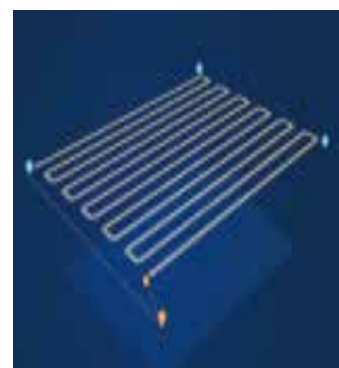


1:500Line painting

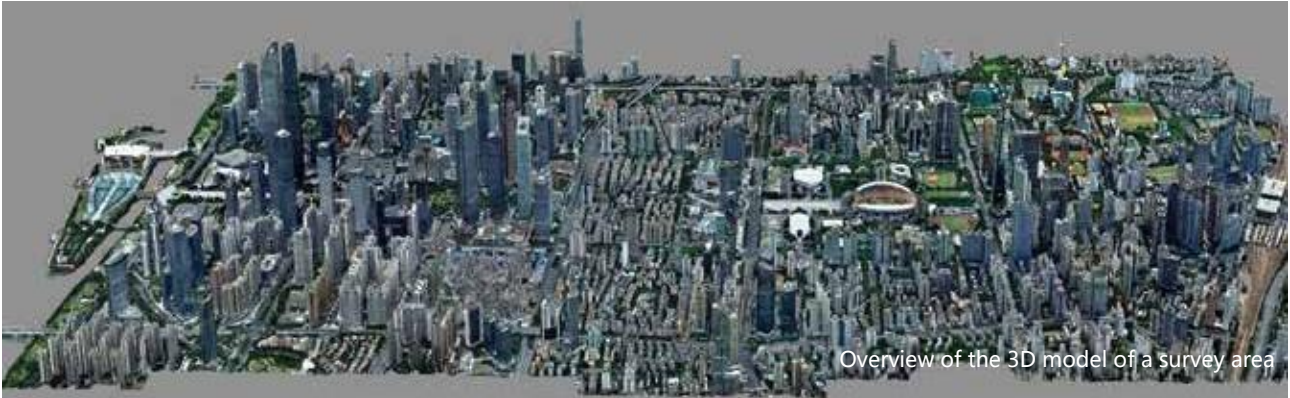
On June 25, 2018, Urban Planning and Design Institute extracted 7 (37% of total figures) 545 plane points for the 1:500 digital line topographic map of the project to check the accuracy of the point points. The error in the field measurement and statistical point point is 2.71 cm, the pass rate is 99.1%, which meets the requirements of 1:500 cadastral topographic map specifications!

KRYPTTON MAPPING UAV SYSTEM SOFT

Surveying and mapping professional control software, guided control interface, advanced flight control algorithm, intelligent generation of the best flight plan, automatic flight, intelligent operation.



KRYPTON MAPPING UAV SYSTEM WORK RESULTS





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GLOBAL PRESENCE

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