SPECIFICATION

UAV

Aircraft System			
model	MF2500	take-off weight	11kg
aircraft type	VTOL (vertical takeoff and landing)	propulison system	electric pusher propeller
system structure	modular design	power supply	lithium polymer battery
wingspan	250cm	battery power(fixed wing)	38500mAh*1
length	148cm	battery power(rotor)	3700mAh*2
payload	1-2kg	body material	kevlar fiber material

Flight Performance			
take-off method	vertical take-off	endurance	best up to 150 minutes
landing method	vertical landing	single flight range	maximum 180km
practical ceiling	5500m	single flight coverage	maximum 46 sq.km/GSD 10cm
cruising speed	typical 21m/s(75km/h)	landing space	vertical landing within 1m

Operation Performance			
pre-flight setup	10minutes	weather limit	beaudfort scale 6 (10.8-13.8m/s)
control model	autopilot	operating temperature	-10℃ to 45℃
radio communication range	3-20km	environmental humidity	90% condensing
transmitting power	1-2W		

Onboard Sensor			
autopilot	1x for auto cruise	magnetometer	1x for magnetic heading
airspeedometre	1x for correcting airspeed	gyroscope	1x for measuring aircraft angle
accelerometer	5x for speed control	GPS receiver	1x for spatial positioning
barometer	1x for calculation of altitude		

Ground Control	
pre-flight checks	via logical and intuitive checklist
basic operations	automatic take-off, flight, data capture and landing
flight planning	includes typical aerial survey programs in addition to standard flight control
camera triggering	automated, realtime display
fail-safe routines	automated
auto return	upon indications of low battery, airspeed anomaly, abnormal attitude
fail-safe commands	manually controlled, one-key operation

Sensor

Options						
	sensor size	resolution	camera lens	GSD	height flight	single flight coverage
DLSR	35.9*24.0 mm full frame	7952*5304	35 mm	5 cm	387 m	24 sq.km
				10 cm	775 m	46 sq.km
double-lens	35.9*24.0 mm full frame	7360*4912	35 mm	3.5 cm	251 m	7 sq.km
				5 cm	358 m	11 sq.km
5-lens	23.5*15.6 mm APS-C	6000*4000	35/20 mm	3.5 cm	178 m	12 sq.km
				5 cm	255 m	18 sq.km

Note: The 150-minute flight performance results from clear weather with gentle breeze or no wind, Temperature between 10℃-25℃, properly and fully charged batteries, plus well-trained operation. For safety reasons, it is strongly recommended not to reach the limit.

SKYCRUISER

MF2500

SOUTH
Target your success

SOUTH SURVEYING & MAPPING TECHNOLOGY CO., LTD.

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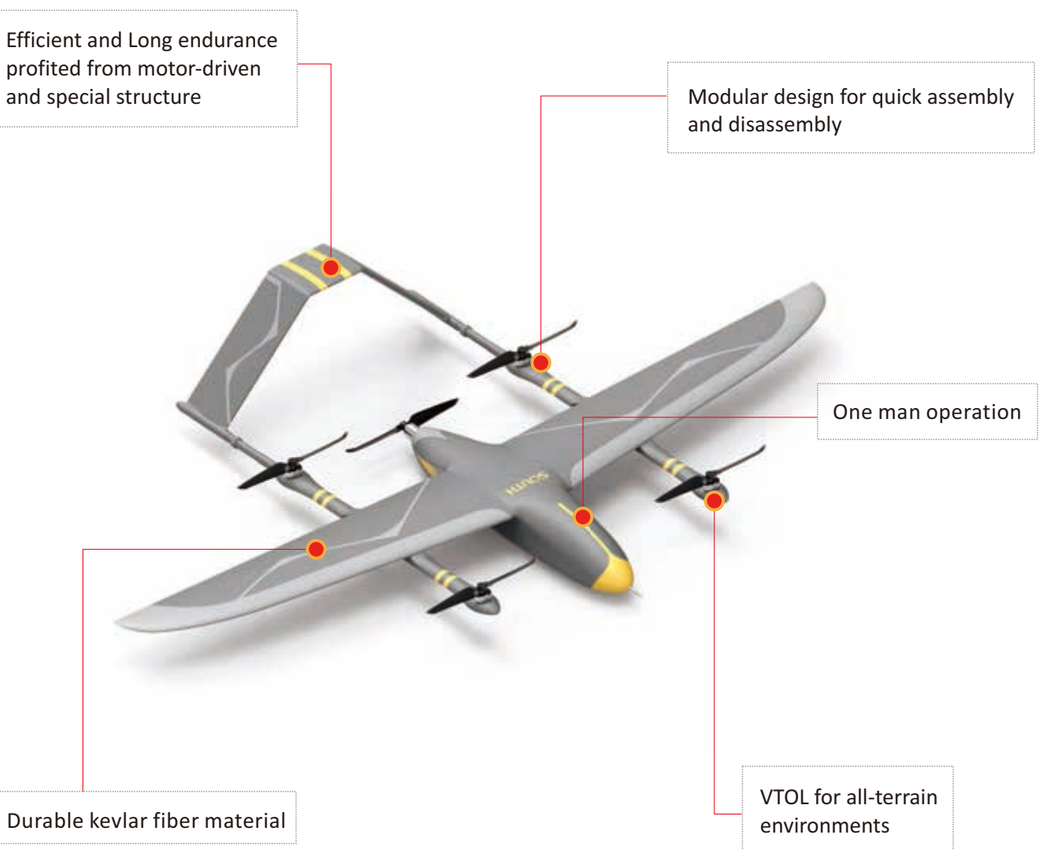
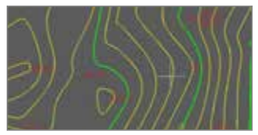
SKYSOLUTIONS

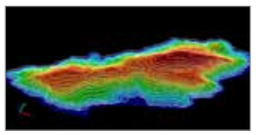
Illustration



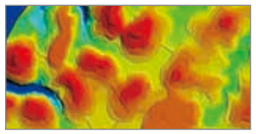
OUTPUTS

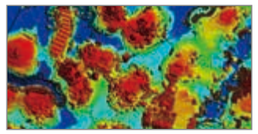

3D Model


Contour Lines


Point Cloud


Vector Map


DEM


DSM

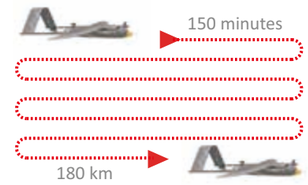

DOM


TDOM

Features

150-minute endurance

With the 150-minute long endurance and 180km-flight range, the MF2500 is better than other VTOL UAV on the market, Accessory: two sets of batteries (300 minutes enough to work one day).



Multiple and Flexible payload

Flexible payloads meet different requirements.


DLSR 5-lens Dual-lens 360° full perspective

High-precision direct geo-referencing

Down to 1cm±1ppm accuracy with inbuilt RTK/PPK module, high precision on demand, no GCPs required.

Accessible to CORS

For differential corrections directly, independent to ground base station.

VTOL 120m

It is easy to work in complex terrain with the 120m VTOL, the MF2500 is better than other VTOL UAV on the market.