

Produk Manufaktur Pembuatan UAV

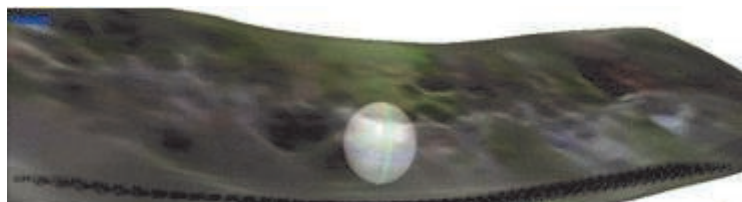


Tipe Airborne Platform	<ul style="list-style-type: none"> - Type Flying-Wing atau Semi Glider - Fitur : <ul style="list-style-type: none"> Autonomous Flight Lama Terbang < 35 menit Jangkauan R/C dan telemetry: < 10km Liputan sekali terbang: 250 Ha (efektif) - Take-Off (Hand Launch) - Landing: belly atau net landing - Power: Motor electric brushless - Flying High: 100m – 450m dpt
Sistem Avionik	<ul style="list-style-type: none"> Autopilot System (open source: Arduino ATMEGA 2560 Controller) - R/C min. 7 CH dan UHF Long Range Radio < 10km - RF Modem for data telemetry (900MHz 1Watt) < 10km - GPS Logger Freq. 5Hz
Sensor Kamera	<ul style="list-style-type: none"> - Modifikasi Point and Shoot Digital Camera 12-14 MPix, GPS Tag Enabled - External Battery untuk kamera - Mounting and anti-vibration system dengan Foam
Portable Ground Control Station (Laptop dan Booster Antenna)	<ul style="list-style-type: none"> - Open Source Mission Planner - Laptop atau netbook - Antenna > 8 dBi - Universal Extended Baterai untuk netbook dan RF receiver
Sistem Pengolah Data	Software Structure from motion Open source photogrammetry

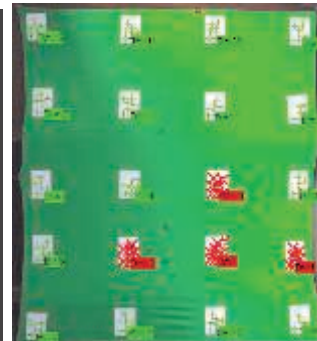
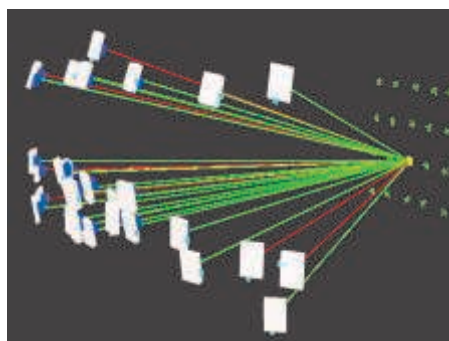
Jasa Kalibrasi Kamera



Kualitas **Lensa non-metric** sebagai penyebab kesalahan geometric terbesar. Kesalahan ini sifatnya **SISTEMATIK**, maka bisa direduksi dengan **Kalibrasi Kamera**



Efek Distorsi lensa menyebabkan obyek 3D cekung/cembung



CAMERA CALIBRATION REPORT		
PROJECT DETAILS		
Camera: Canon EOS 5D Mark II		
Filename:		
Calibration Date: 09/07/2013 15:56pm		
METRIC CALIBRATION PARAMETERS		
Resolution = 5616 x 3744 pixels		
Pixel width = 0.0064mm, Pixel height = 0.0064mm		
	VALUE	STANDARD ERROR
Principal distance	$c = 34.3770mm$	0.0058mm
Principal point offset in x-image coordinate	$x_p = -0.0426mm$	0.0058mm
Principal point offset in y-image coordinate	$y_p = 0.1852mm$	0.0058mm
3rd-order term of radial distortion correction	$K1 = 3.20943e-005$	2.8399e-007
5th-order term of radial distortion correction	$K2 = -1.00710e-007$	1.2927e-009
7th-order term of radial distortion correction	$K3 = -6.4145e-012$	2.0434e-012
Coefficient of decentering distortion	$P1 = -4.1203e-006$	1.120e-006
Coefficient of decentering distortion	$P2 = -2.1029e-006$	1.120e-006
No significant differential scaling present	$B1 = 0.0000e+000$	3.190e-010
No significant non-orthogonality present	$B2 = 0.0000e+000$	3.190e-010

CAMERA CALIBRATION	
GAUSSIAN RADIAL DISTORTION CORRECTION	
For principal distance c , Gaussian radial distortion given for any radial distance r (mm) as:	
$d(r) = K1*r^2 + K2*r^4 + K3*r^6$	
conversion $d(r)$ = mm	
conversion $d(r)$ = pixel	
VALUE	STANDARD ERROR
$c = 34.3770mm$	0.0058mm
$K1 = 3.20943e-005$	2.8399e-007
$K2 = -1.00710e-007$	1.2927e-009
$K3 = -6.4145e-012$	2.0434e-012
$d(r)$	$d(r)$ (pixels)
0.00	0.0
2.00	0.7
4.00	5.8
6.00	19.1
8.00	43.8
10.00	81.8
12.00	133.8
14.00	187.9



Delivery GeoInformation
and consulting

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