

YANMU
INDONESIA



VTOL Z4

The Professional Mapping Drone



130 Km

Max. Flight Distance*



120 Minutes

Max. Flight Endurance*



10 Km

Control Radius*



1.1 Kg

Max. Payload Capacity

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INDONESIA

Technical Specification

Drone type	Tilt-rotor VTOL
Dimension	2400*1100*330mm
Weight (empty)	4.2kg
Maximum takeoff weight	7.3kg
Maximum payload weight	1.1kg
Maximum ascending speed (VTOL)	2.5m/s
Maximum descending speed (VTOL)	5m/s
Typical cruising speed	70km/h
Maximum flying speed	100km/h
Maximum takeoff altitude (AMSL)	4000m
Maximum flying altitude (AMSL)	4500m
Maximum wind resistance	Level 7 in cruise/Level 6 in VTOL
Weather proof	Small rain/snow/fog
Operation temperature	-20~60°C
Material	Carbon fiber & Glass fiber composite
Hovering accuracy	Vertical $\pm 0.2\text{m}$; Horizontal $\pm 1\text{m}$
Takeoff and landing space required	3*3m
Endurance	90-120 minutes depending on payload
Flight range	100-130km

*(Tested under ideal condition)





Navigation & Flight Control

Navigation	GNSS+INS
Navigation light	Optional
IMU	2 sets
Flight mode	Autonomous/Semi-autonomous
Safety Assurance	One-button RTL/Out of control RTL/Low battery RTL Emergency Protection Function
FDR	Yes

Power System

Motor	Brushless electric motor
ESC	Brushless ESC
Propeller	14 inch customized propeller
IP rating	IP56
Battery type	Li-poly/6S
Battery capacity	18000mAh
Battery charger	Fast charger

Data Transmission

Data link	845MHz
Data link range	10-15km

*(Tested under ideal condition)



Mapping Camera 24.3 MP
*supplied



Oblique Camera 5 x 24.3 MP

Camera Specification

Sensor	Exmor APS HD CMOS sensor(23.5x15.6mm)
Number of Pixels(effective)	24.3MP
Lens compatibility	E-mount lenses supported
Hot Shoe Signal	relay(low level)
Shutter Trigger	30-1/4000sec
Shutter Speed	Up to 6FPS
Continuous shooting	3:2,16:9
Image sensor aspect ratio	JPEG,RAW,JPEG
Image Format	SD/SDHC/SDXC Card/MS
Storage Card Type	Button/USB
Parameter Setting	SD card/USB
Data Reading	HDMI USB2.0
Interface	8.4V
Power	7.6x6.2x2.6cm
Size	112.5g
Weight	

CAMERAS
OPTION

Micasense RedEdge-MX



CAMERAS

OPTION

Weight	231.9 g (8.18 oz.) (includes DLS 2 and cables)
Dimensions	8.7cm x 5.9cm x 4.54cm (3.4in x 2.3in x 1.8in)
External Power	4.2 V DC - 15.8 V DC 4 W nominal, 8 W peak
Spectral Bands	Blue, green, red, red edge, near-IR (global shutter, narrowband)
Wavelength (nm)	Blue (475 nm center, 32 nm bandwidth), green (560 nm center, 27 nm bandwidth), red (668 nm center, 14 nm bandwidth), red edge (717 nm center, 12 nm bandwidth), near-IR (842 nm center, 57 nm bandwidth)
RGB Color Output	Global shutter, aligned with all bands
Ground Sample Distance (GSD)	8 cm per pixel (per band) at 120 m (~400 ft) AGL
Capture Rate	1 capture per second (all bands), 12-bit RAW
Interfaces	Serial, 10/100/1000 ethernet, removable Wi-Fi, external trigger, GPS, SDHC
Field of View	47.2° HFOV
Triggering Options	Timer mode, overlap mode, external trigger mode (PWM, GPIO, serial, and Ethernet options), manual capture mode



Sony RX1RII

Sensor	35.9 x 24.0mm, Exmor R CMOS sensor
Number of Pixels(effective)	43.6 MP
Lens compatibility	E-mount lenses supported
Hot Shoe Signal	
Size	113.3 x 65.4 x 72.0 mm
Weight	480g (1 lb 0.9 oz.) / 507g (1 lb 1.9 oz.) (With battery & Memory Stick PRO Duo)



Sony A7RII

Sensor	35.9 x 24.0mm, Exmor R CMOS sensor
Number of Pixels(effective)	42.4 MP
Lens compatibility	E-mount lenses supported
Hot Shoe Signal	
Size	126.9 x 95.7 x 60.3 mm
Weight	582 g (Body Only) / 625 g (With battery & media)

CAMERAS OPTION

GCS

Ground control system

Z4 is equipped with industrial-level VTOL autopilot as well as professional GNSS. Through SMD own-designed Flight plan and Control Software, it ensures fully autonomous flight including take-off, transit, cruising and landing.

It can support up to 1000 waypoint flight planning as well as 100 waypoint emergency landing.



REASONS TO CHOOSE Z4

PPK Module generates
Centimeter-grade survey accuracy

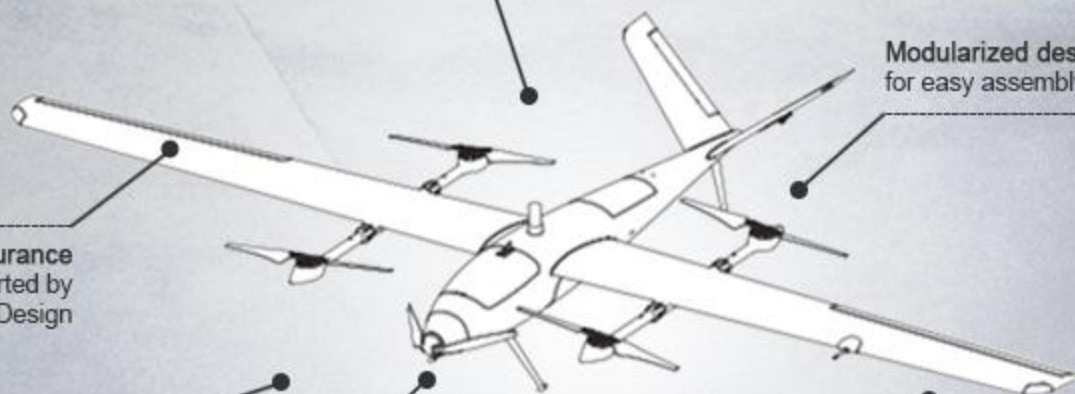
Modularized design
for easy assembly & disassembly

Ultra-long endurance
supported by
best Aerodynamics Design

Redundancy IMU design
provides top reliabilities

VTOL Technology
for zero site Limitation

High strength & light-weight
composite airframe structure

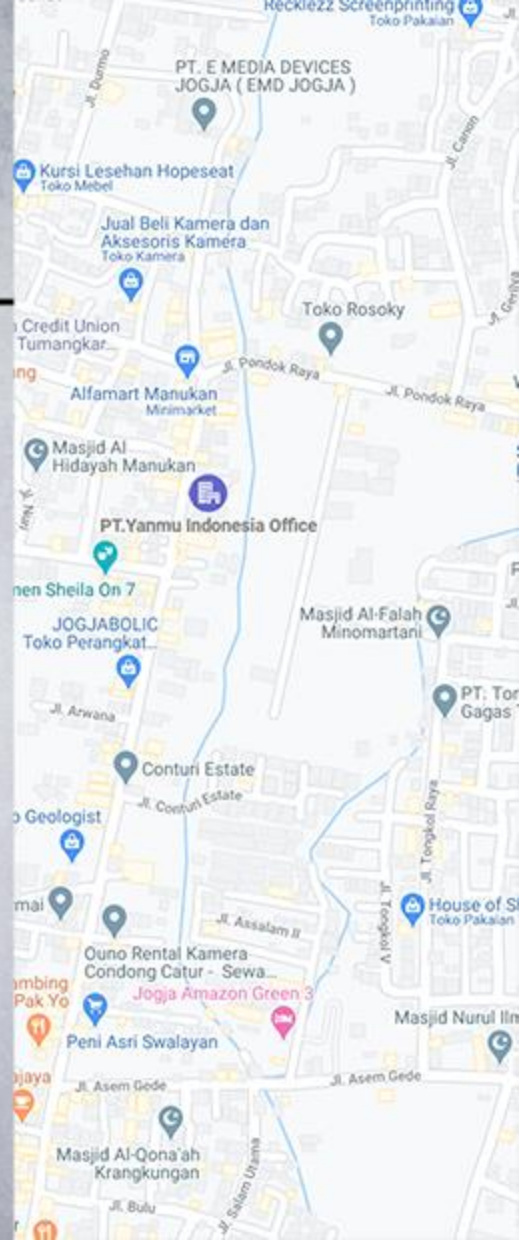
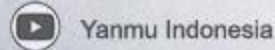
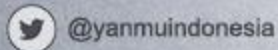
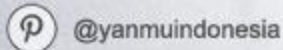
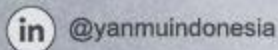
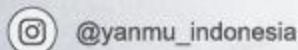
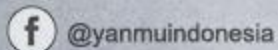


About YANMU

PT. Yanmu Indonesia (Yanmu) is a distributor and aerial surveys specialist. We market various types of drones and has a goal to become a leader in this field. Yanmu established since 2013 in Sleman, Yogyakarta, Indonesia. Yanmu is an active sole distributor in the marketing of drones for mapping needs, training on the use of drones and various other related services.

Currently, Yanmu has become the exclusive distributor for the products Sensefly, LiDAR USA and SMD.

For products reference and update please subscribe to our news letter at www.yanmu.co.id





eBee-x

The eBee X is the fixed-wing drone for all your mapping needs. Designed to boost the quality, efficiency and safety of your data collection, it has a camera to suit every job, the accuracy and coverage to meet every project's requirements, and can work virtually every type of site.



eBee-SQ

The eBee SQ agriculture drone captures actionable crop data across four multispectral bands, plus RGB imagery, spanning hundreds of acres in a single flight.



eBee Classic

The senseFly eBee Classic is a fully autonomous and easy-to-use mapping drone. Use it to capture high-resolution aerial photos you can transform into accurate orthomosaics (maps) & 3D models.