

Zenmuse P1

The Zenmuse P1 integrates a full-frame sensor with interchangeable fixed-focus lenses on a 3-axis stabilized gimbal. Designed for photogrammetry flight missions, it takes efficiency and accuracy to a whole new level.

General

Product Name	ZENMUSE P1
Dimensions	198×166×129 mm
Weight	Approx. 800 g
Power	20W
IP Rating	IP4X
Supported Aircraft	Matrice 300 RTK
Operating Temperature Range	-20° to 50° C (-4° to 122° F)
Storage Temperature Range	-20° to 60° C (-4° to 140° F)
Absolute Accuracy	Horizontal: 3 cm, Vertical: 5 cm * * Using Mapping Mission at a GSD of 3 cm and flight speed of 15 m/s, with an 75% front overlap rate and a 55% side overlap rate.

Camera

Sensor	Sensor size (Still): 35.9×24 mm (Full frame) Sensor size (Max video recording area): 34×19 mm Effective Pixels: 45MP Pixel size: 4.4 μm
Supported Lenses	DJI DL 24mm F2.8 LS ASPH (with lens hood and balancing ring/filter), FOV 84° DJI DL 35mm F2.8 LS ASPH (with lens hood and balancing ring/filter), FOV 63.5° DJI DL 50mm F2.8 LS ASPH (with lens hood and balancing ring/filter), FOV 46.8°
Supported SD Cards	SD: UHS-I rating or above; Max capacity: 512 GB
Storage Files	Photo / GNSS Raw Observation Data/ Image Log File
Photo Size	3:2 (8192×5460)
Operation Modes	Photo, Video, Playback
Minimum photo interval	0.7 s
Shutter Speed	Mechanical Shutter Speed: 1/2000*-1 s Electronic Shutter Speed: 1/8000-1 s *Aperture value no larger than f/5.6
Aperture Range	f/2.8-f/16
ISO Range	Photo: 100-25600 Video: 100-25600

Video

Video Format	MP4,MOV
Video Resolution	16:9 (1920×1080) 16:9 (3840×2160)* *Only 35mm lens supported
Frame Rate	60fps

Gimbal

Stabilized System	3-axis (tilt, roll, pan)
Angular Vibration Range	±0.01°
Mount	Detachable DJI SKYPORT
Mechanical Range	Tilt: -130° to +40°; Roll: -55° to +55°; Pan: ±320°