

PowerEye Product Specifications

AIRCRAFT

Weight	3950 g (Battery and propellers included)
Diagonal Size (Excluding Propellers)	650 mm
Physical Dimension	340 mm x 285 mm x 296mm(Close) 513mm x 513 mm x 310mm (Flight)
Max Ascent Speed	5 m/s (Professional mode)
Max Descent Speed	2 m/s (Professional mode)
Hover Accuracy	2 m/s (Professional mode)Vertical: +/- 0.1 m (When Vision Positioning is active, 0.2 - 4 m); +/- 1 m Horizontal: +/- 0.2 m (Surface with clear pattern and adequate lighting); +/- 1.5 m
Max Flight Speed	18 m/s (Professional mode)
Operating Frequency	2.4 GHz
Propellers Size	15.5 inch
Power	400 W (Hover) 800W (Max)
Max Flight Time	Approx. 29.5 min
Max Attitude	35 degrees
Max Service Ceiling Above Sea Level	4,000 m
Operating Temperature	-10 - 40°C
GPS Mode	GPS and BeiDou
Wind Resistance	< =5 level

GIMBAL

Controllable Pitch	0 - 90°
Range	
Controllable Yaw	-180° - +180°
Range	
Stabilization	3-axis (Pitch, roll, yaw)
Controllable	0.05°
Accuracy	

STANDARD REMOTE CONTROLLER

Operating	0° - 40°C
Temperature	
Battery	5000 mAh LiPo 1S
Operating Voltage	120 mA / 3.7 V
Operating Life	35 hours
Charging Time	5 hours

OPTICAL POSITIONING

Velocity Range	≤ 4 m/s (2 m above ground)
Altitude Range	0.2 - 3.5 m (0.66 - 13.12 ft)
Operating	Surface with clear pattern and adequate
Environment	lighting (Lux > 15)

CHARGER

Input	AC 90 - 264 V
Frequency	47-63 Hz
Output Port 1	25.5V \pm 0.1 V
Output Port 2	5 V \pm 0.1 V
Operating Temperature	-10° - 45°C (14° - 113°F)
Rated Power	138.5 W

PowerEye payload

outline size	105*120*90mm
weight	537g
power Supply	12V/5V/3.3V
control signal	UART/SPI/I2C/CAN
endurance time	0.5kg 21.5m
bearing weight	0-2kg
one click throw	support
downward FPV	support
forward FPV	support
packaging method	Independent packaging or containerizing

CAMERA

Sensor	4/3" CMOS
Lens	Panasonic Lumix G 14mm F2.5 ASPH (Standard) Olympus M.Zuiko 17mm f/1.8 Olympus M.Zuiko ED 14-42mm f/3.5-5.6 EZ(zoom) Olympus M.Zuiko 25mm f1.8 Olympus M.Zuiko 45mm f1.8
ISO Range	100 - 6,400 (Photo); 100 - 1,600 (Video)
Shutter Speed	8 s to 1/8,000 s
Image Max Size	4640x3480
Still Photography Modes	Single shot Burst shooting: 3 / 5 / 7 frames Auto Exposure Bracketing (AEB): 3 / 5 bracketed frames at 0.7EV Bias Timer shooting
Video Recording Modes	4K 4096x2160 UHD 3840x2160
Supported SD Card	Micro-SD card
Types	Max capacity: 64 GB. Class 10 or UHS-1 rating required
Max Video Bitrate	60 Mbps
Supported File Formats	FAT32/exFAT JPEG, DNG MP4, MOV (MPEG-4 AVC/H.264)
Operating Temperature	-10° - 40°C

BASE STATION

Operating Frequency	Aircraft to Base Station: 2.400 - 2.483 GHz
Frequency	Base Station to other devices: 5.725 GHz - 5.875 GHz
Max Transmission Distance	5 km (3.1 miles) (Subject to regulation and local operating conditions). Distance will be shorter for CE.
Operating Temperature	0° - 40°C (32° - 104°F)
Battery	2,300 mAh LiPo 1S
Transmitter Power	20 dbm @ CE, 28 dbm @ FCC
Operating Voltage	800 mA / 3.7 V
Operating Life	1.5 hours
Charging Time	3 hours
Latency	300 ms

POWEREYE SMART BATTERY

Capacity	9000mAh
Voltage	22.2V
Battery Type	LiPo
Energy	99.9WH X 2
Net Weight	1230 g
Operating Temperature	-10° - 40°C
Temperature	
Charging Current	≤2C

SDK

UAV

open aircraft attitude, GPS and other informatio
(later)

Camera

Open camera configuration, photos, video, image
acquisition and other functions

task module

Open mount interface, data transfer protocol, port
configuration and other functions

control

Open aircraft route control, takeoff control and
other functions