Shenzhen XQPOWER Technology Co., LTD

FEIYIDA

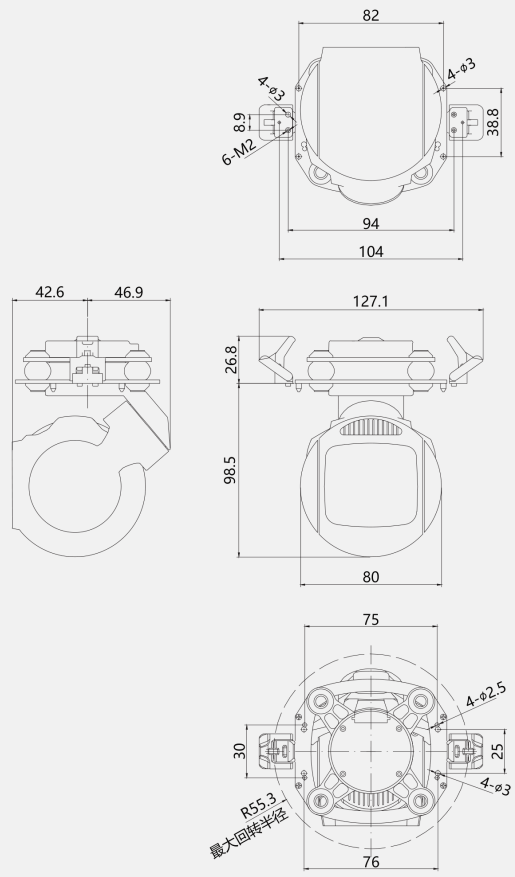
PRODUCT SPECIFICATION

DOCUMENT NO.	FYD-80Pro-SP-2601
VER	V1.0
PAGE	P.1
PREPARE DATE	20261106

SERIES	FYD-80	NAME	40x 4K Zoom Spherical Pod	MODEL	FYD-80Pro	TYPE	4K Gimbal Camera

Application	UAV inspection / surveillance / patrol

DIMENSIONAL DRAWING - POD



All dimensions in mm.

SIDE VIEW



GENERAL SPECIFICATIONS

NO.	General	
1-1	Dimensions (Pod)	85.8 x 86 x 129.3 mm
1-2	Dimensions (GCU)	45.4 x 40 x 13.5 mm
1-3	Weight (Pod)	405 g
1-4	Weight (GCU)	18.6 g
1-5	Operating Voltage	14 ~ 53 VDC
1-6	Power (Pod)	6.7 W avg. (light off) / 55 W stall (light on)
1-7	Power (GCU)	1.8 W
1-8	Installation	Upright / inverted
NO.	**Gimbal**	
2-1	Gimbal Type	3-axis nonorthogonal mechanical stabilization
2-2	Angular Accuracy	±0.01°
2-3	Controllable Range	Pitch -157° ~ +70° Yaw ±360° continuous
2-4	Max. Controllable Speed	Pitch ±200°/s Yaw ±200°/s
NO.	**Zoom Camera**	
3-1	Image Sensor	1/2.8" CMOS, 8.29 MP effective
3-2	Focal Length	4.8 ~ 48 mm
3-3	Aperture	f/1.7 ~ f/3.2
3-4	Field of View	HFOV 60.2°~6.6° VFOV 36.1°~3.7° DFOV 67.2°~7.6°
3-5	Resolution	3840 x 2160
3-6	Pixel Pitch	1.45 μm
3-7	Electronic Shutter	1 ~ 1/30000 s
3-8	Optical Zoom	10x
3-9	Digital Zoom (equivalent)	4x
3-10	Hybrid Zoom	40x
3-11	Min. Illumination	0.01 Lux/F1.5 (night vision off) 0.001 Lux/F1.5 (on)

PREPARED	CHECKED	APPROVED

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PRODUCT SPECIFICATION

DOCUMENT NO.	FYD-80Pro-SP-2601
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SERIES	FYD-80	NAME	40x 4K Zoom Spherical Pod	MODEL	FYD-80Pro	TYPE	4K Gimbal Camera

Product view / target distance / technical data

PRODUCT VIEW & TARGET DISTANCE



Rear oblique view



Front view

TARGET DISTANCE (EN62676-4:2015)

TARGET	PERSON	SMALL VEHICLE	LARGE VEHICLE
Detect	1449 m	1904 m	4057 m
Recognize	290 m	381 m	811 m
Verify	145 m	190 m	406 m

TECHNICAL DATA

OPTICAL & SYSTEM SPECIFICATIONS

NO.		
Laser Lighting Module		
4-1	**Wavelength**	850 ± 10 nm
4-2	**Laser Power**	0.8 W
4-3	**Beam Angle**	8°
4-4	**Beam Diameter**	14 m @ 100 m
4-5	**Effective Illumination Distance**	≤ 200 m
4-6	**Laser Safety**	Class 3B (IEC 60825-1:2014)
Image & Video		
5-1	**Image Format**	JPEG
5-2	**Max. Image Resolution**	3840 x 2160
5-3	**Photo EXIF**	Shooting point coordinates
5-4	**Video Format**	MP4
5-5	**Max. Video Resolution**	4K@30fps
5-6	**Stream Encode Format**	H.264 / H.264H / H.264B H.265 / MJPEG
5-7	**Stream Network Protocol**	ONVIF / GB/T28181 / RTSP
5-8	**OSD**	Longitude, latitude & altitude overlay
Storage		
6-1	**Supported SD Card**	microSD, up to 256 GB, Speed Class 10 or above
Environment		
7-1	**Operating Temperature**	-20°C ~ 50°C
7-2	**Storage Temperature**	-40°C ~ 60°C
7-3	**Operating Humidity**	≤ 85% RH (non-condensing)
Control & Software		
8-1	**Control Interface**	Network / serial / S.BUS (with GCU)
8-2	**Protocol**	Private protocol / MAVLink
8-3	**Software**	Dragonfly / customized QGC
8-4	**Yaw Rotation**	360° x N continuous

PREPARED	CHECKED	APPROVED