WISPR

PAYLOAD SPECIFICATION

24MP Mapper

AERIAL MAPPING CAMERA · SONY 24 MP APS-C

A 24-megapixel Sony APS-C mapping camera on a stabilized 3-axis gimbal, purpose-built for high-resolution aerial survey and orthomosaic capture.

24MP	APS-C	16MM	83°	3 AXIS
RESOLUTION	CMOS SENSOR	SONY E LENS	FIELD OF VIEW	STABILIZED GIMBAL

Camera Lens

Lens Options	**Sony E Mount 16mm Lens**
Field of View (FOV)	**83°**

Gimbal

Angular Vibration Range	**±0.02°**
Max Controlled Rotation Speed	**Pan 180°/s** Tilt 180°/s · Roll 180°/s
Mechanical Endpoint Range	**Pan ±326°** Tilt +45° ~ -125° · Roll +45° ~ -45°
Controlled Rotation Range	**Pan ±320°** Tilt +40° ~ -120° · Roll ±40°
Operating Temperature	**32°F – 122°F**

Key Capabilities

- 24 MP Sony APS-C CMOS sensor
- Fixed 16 mm Sony E-mount lens, 83° FOV
- 3-axis stabilized gimbal (±0.02°)
- RAW / JPEG / HEIF still capture
- SnapFit integration on WISPR platforms

BUILT FOR MAPPING

The 24 MP APS-C sensor and fixed 16 mm lens deliver crisp, geometrically stable imagery for orthomosaics, 3D models, and inspection at survey speed.

APPLICATIONS

Orthomosaic mapping, construction progress, corridor and asset inspection, precision agriculture, and site documentation.

Camera

Sensor	**Exmor APS-C CMOS**
Sensor Size	**1.11"**
Sensor Width	**0.93"**
Sensor Height	**0.61"**
Photo Resolution	**24 megapixels**
Image Size	**6000 x 4000**
Photo Format	**JPEG, HEIF, RAW**
Video Resolution	**1080P @ 60p max**
Video Format	**XAVC S: MPEG-4 AVC/H.264** AVCHD 2.0 / MP4
Shutter Type	**Mechanical / Electronic Shutter**
Shutter Speed	**Still (Mechanical): 1/4000 to 30 s**
Exposure Compensation	**+/- 5.0EV in 0.3EV steps**
ISO Sensitivity	**Auto, 100–25600** 51200 available with MFNR
PAL/NTSC	**Supported**

INTEGRATION

Mounts on WISPR SkyScout platforms with SnapFit adapters for rapid payload swaps between mapping, LiDAR, and inspection missions.