

# E90 VISUAL REALITY



## ULTRA HIGH RESOLUTION

The E90 camera is a wide-angle, 20MP, high resolution payload/camera. Gimbal stabilized, the E90 utilises a 1-inch sensor designed for applications requiring highly detailed images allowing for broad vision in close-up environments.

### 1-Inch Sensor

The E90's 1-inch sensor provides for greater dynamic range, increased sensitivity in low-light environments, and natural, deep colors ideal for orthomapping, 3D modeling, and close-up inspections.

|                |    |
|----------------|----|
| Yuneec E90     | 1" |
| Sony RX100     |    |
| Nikon 1        |    |
| 1/2.3"         |    |
| Typhoon H      |    |
| Sony ActionCam |    |

### Ultra High-Speed Image Processing

The advanced H2 signal processing enables Ultra-HD 4K video @ 60fps which delivers extremely smooth, fast motion video reproduction. Choose between HEVC for optimal bandwidth or common .mp4 file formats for archive, delivery, or best post-processing options.



### Precision Lens System

The E90's 23mm lens equivalent provides wide angle views with low distortion and minimal lens dispersion. The E90 comes with a lens adapter ring threaded to fit 40.5mm standard filters for flexibility and convenience.



### Hot-Swap Capable Payload



All Yuneec commercial camera systems are hot-swap capable which minimizes down time and increases productivity.

The E90 camera/gimbal system is interchangeable with the E50 or CGOET payloads, without powering down. The quick release system provides greater versatility from the H520 in the field. The quick release and lock mechanism of the gimbal and airframe mounting system enables fast and efficient exchange of cameras.



**4K**

100MB 60FPS VIDEO CAPTURE

**20**<sup>MP</sup>

STILL IMAGES



HOT SWAP CAMERA

**Y**  
**X** **Z**

3 AXIS GIMBAL

**HD**  
**720P**

DIGITAL VIDEO DOWNLINK

**360°**

CONTINUOUS GIMBAL ROTATION



REMOTE CAMERA SETTINGS



LOW DISTORTION LENS

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## Capture Highly Detailed Images

The E90 is designed for law enforcement applications such as accident recreation, search and rescue operations and for 3D mapping/modeling. In addition, broadcast and production professionals will appreciate the dramatic aerial shots afforded by the E90's high frame rate and accurate color.



The E90's 1-inch 4K resolution sensor, combined with the H520 best-in-class airframe stability, provides for extremely high quality imaging. The result is superior high-resolution 2D ortho or 3D maps, precision volumetrics, and 3D surface models.



## Specifications

|                           |                                      |
|---------------------------|--------------------------------------|
| BURST SPEED (PHOTO)       | 3@1S / 5@1S / 7@1S                   |
| COLOR SENSITIVITY         | RGB                                  |
| COMPRESSION BIT RATE      | 100MBPS                              |
| COMPRESSION TYPE          | AVC/HEVC                             |
| DNR                       | 2D FILTER                            |
| EFFECTIVE PIXELS          | 20 MEGAPIXELS                        |
| FOV                       | DFOV 90.3 ± 3°                       |
| FOCAL LENGTH              | 23MM                                 |
| FRAMERATE                 | 24/25/30/48/50/60/120                |
| FSTOP RANGE               | F2.8 ± 5%                            |
| GIMBAL AXIS               | 3                                    |
| GIMBAL CONTROL ACCURACY   | ± .02°                               |
| GIMBAL MAX. CONTROL RANGE | TILT: -90° - 30° PAN: 360° LIMITLESS |
| GIMBAL MAX. CONTROL SPEED | TILT: 50°/S PAN: 50°/S               |
| ISO RANGE                 | 100 - 12800                          |
| MAX VIDEO RESOLUTION      | 4K 60FPS                             |
| MINIMUM SD CARD           | CLASS 10 U3                          |
| MTF                       | 104LP/MM, CENTER: 0.6, CORNER : 0.4  |
| SENSOR SIZE               | 1 INCH CMOS                          |
| SHUTTER SPEED             | 1/8000 - 8S                          |
| SHUTTER TYPE              | ROLLING                              |
| SNR                       | ISO100, SNR 36DB                     |
| STORAGE TEMPERATURE       | 10°C - 30°C                          |
| WEIGHT                    | 330G                                 |

## E90 Camera and Gimbal

