



**The E1 camera is the World's smallest 4K UHD (ultra-high definition) micro four-thirds (MFT) camera with an interchangeable lens system.** The E1's micro four-thirds lens mount accommodate a wide range of auto-focus (AF) and manual-focus (MF) lenses from brands such as Olympus, Panasonic, Lumix, Leica and Sigma. All help the E1 capture the highest-quality images possible in its market group.

The E1 camera features a 16MP Ambarella A9 image processor which enables superior low light performance. It easily captures cinema quality 4K 4096x2160 video at 24 fps or ultra-high definition video 3840x2160 at 30 fps with H.264 compression.

Advanced 3D noise filters actively remove ghosting & blurring. The E1 camera also uses motion compensated temporal filtering (MCTF) technology to reduce noise and jitter to enable incredible low-light performance - the camera's can shoot at up to ISO 102,400 and maintain high image quality, up to ISO 6400.

SeeSense are able to provide full technical assistance and back up for this camera. Please contact SeeSense for further details and for our recommended lens options.

### Specifications:

- One-piece Ultra compact 4K resolution camera system (75 x 56 x 50mm)
- Output selectable between 4K, 1080p and 720p
- Choice of 24, 25, 30, 50, & 60 fps
- Also 240 fps slo-mo at 720p
- 16 megapixel sensor
- Active Micro 4/3 lens mount
- Superior low light performance
- Cast magnesium housing dissipates heat
- On-screen menu
- WiFi range +/- 80 metres
- Phone App can control E1 camera
- Weight 210 g. (with battery, without lens)
- Comprehensive range of lenses available
- 1 year camera warranty

This camera has many suitable applications and uses:

- Micro Cinematic Camera
- Film & Broadcast
- Pre-visualisation
- Natural History
- Supplementary Camera
- Filming in tight spaces / extreme angles
- POV Camera
- Drone, UAV / Aerial Camera
- Bullet time array & Timelapse Imaging
- Motion Capture
- 360 Degree VR
- Industrial video / inspection



Rev: 1.010.0516 E&OE

### Specification - Features

Image Sensor	Ambarella A9S75 Chipset 4/3" Panasonic MN34230 16MP CMOS sensor
Output Pixels	Horizontal: 4096, Vertical: 2160
Sync / Freq	4K @ 24 fps; UHD @ 30 fps; 1080p @ 60 fps; 720p @ 240fps
Sensitivity	11 stops
Min. Illumination	100 - 102,400 ISO
Frame Rate	4K @ 24 fps; UHD @ 30 fps; 1080p @ 60 fps
Gen Lock	Yes, automatic function via IO port
Shutter Modes	Auto / Manual – Off up to 1/8000s
Gain	Manual, -3.0 to +3.0 EV
White Balance	AWB (Automatic White Balance) or Manual 2,300K - 7,500K
Gamma	OFF / MANUAL : 0 to 25dB (1dB/step)
Auto Focus	Single, Continuous Centre & Flexible Zone
Remote Control	Via Z-cam App. with 200ms latency

### Storage

Storage Type	Micro SD (SD / SDHC / SDXC)
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### Connectivity

USB	Micro USB, 2.0
HDMI	Mini HDMI, 1.4a
CVBS	YES
Microphone Port	3.5mm
Wi-Fi	802,11n with 200 ms Latency
Bluetooth	4.0 with 2 weeks standby
DC Power Port	5 Volts 2 Amps

### Specification - Physical

Battery	2,000 mAh, Lithium Ion Battery with Charger (45 minutes set @ 4K with WiFi)
Display	Rear 320 x 240 OLED
Body Material	Magnesium Alloy
Lens Mount	Active Micro Four-Thirds (MFT)
Dimensions	75.2 x 56.1 x 50.25mm
Weight (with Battery)	210 grammes (Battery 42g)
Camera Mount	1/4 UNC Standard tripod socket
Operating Temperature	0°C to + 40°C

### Specification Performance - Video

Video Resolution Options	4096 x 2160 / 24 fps
	3840 x 2160 / 24, 25 & 30 fps
	2880 x 2160 / 24, 25 & 30 fps
	1920 x 1920 / 24, 25 & 30 fps
	1920 x 1440 / 24, 25 & 30 fps
Video Encoder	1920 x 1080 / 24, 25, 30, 50 & 60 fps
	1280 x 720 / 50, 60 & 240 fps
	840 x 480 / 25 & 30 fps
Video Encoder	H.264 High Profile
Bitrate for 4K UHD	60 Mbit/s
Audio Encoder	AAC
Speaker	NO
Manual Shutter Speed	YES
Flicker Reduction	Auto, 60Hz or 50 Hz
File Format	MOV
Microphone	Stereo, No audio pre-amp

### Specification Performance - Photo

Photo Resolution Options	16MP 4640 x 3480
	12MP 4000 x 3000
	8MP 3260 x 2448
	5MP 2592 x 1944
File Format	JPEG (DCF, EXIF), RAW
JPEG Quality Levels	Super Fine, Fine, Basic
Uncompressed Format	DNG
Time Lapse	YES Supported
Maximum Burst Speed	15 fps @ 16MP
Maximum Shutter Speed	1/8000 second

### Lenses

The E1 supports Leica, Lumix Olympus and Panasonic, etc MFT AF lenses. It also supports a wide variety of manual focus lenses

If you have a specific requirement please contact SeeSense for advice.



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