



The Kandao Obsidian R camera is a fully integrated six sensor professional 3D 360° VR one piece camera system.

The Obsidian R is one of the most stable and convenient professional VR360 cameras in the market today. It has synchronised (genlocked) sensors, as well as harmonised auto white balance and auto exposure for simplified production workflow. All six camera sensors are integrated to ensure that they are as close together as possible.

Kandao video and still files are compatible with commercially available professional stitching software and their own comprehensive Kandao Studio software (windows only) producing the highest quality images with superbly accurate stitch lines for a precise sync.

Now users can focus on storytelling rather than technical issues.

Sophisticated

Superior

Compact

Powerful

HIGH RESOLUTION 360° 3D VIRTUAL REALITY CAMERA

Specifications:

- One-piece professional 3D 360° VR camera
- Ergonomic Design
- Captures VIDEO, PHOTO or TIME LAPSE
- **8K x 8K** resolution @ 30 fps, 4K x 4K@ 60 fps
- **LIVE 4K 360° 3D @ 3Mbps ~ 4mbps** through one single ethernet cable
- <20 metre WiFi remote control via iOS and Android app. (Requires external Router)
- 3 Button Intuitive Operation
- LED Camera Status Indicators
- Precise pixel level synchronisation
- Harmonised Auto-Exposure and White Balance
- Stabilisation with 9-DoF Motion Sensor
- Sealed Aluminium / Magnesium Housing
- Requires 2 x Canon LP-E6N Li-ion Rechargeable Batteries (Not Included)
- 2 years warranty
- Kandao Studio Post Production Solution



Other Kandao cameras include:

Obsidian S **High Speed 4K x 4K @ 120 fps**

Obsidian Go **Starter Camera 4K x 4K**

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

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Specification - Features

Image Sensor	6 x Sony 12M Back-Illuminated CMOS sensors
Stitched Output Resolution	7,680 x 7,860 pixels (Maximum)
Sync / Freq	4K @ 60 fps; 8K @ 30 fps
Spherical Resolution	4K x 4K @ 60 fps / 8K x 8K @ 30 fps post stitching video output. 8K x 8K VR photo
Lens	6 x 185° F2.8 1.98mm Fisheye Lens
Single Lens Res.	8K x 8K 3,800 x 3,000; 4K x 4K 1,900 x 1,500
ISO	100 - 3,200 ISO
M.O.D.	1.5m (closer than <1m might not stitch)
Dynamic Range	10 Stops (Video); 12 Stops (Photo)
Frame Rate	60 fps @ 4K x 4K ; 30 fps @ 8K x 8K
Photo Resolution	8K x 8K 3,800 x 3,000
Sync	Kandao Sync Technology at line sync level between all six sensors
Auto Exposure	Harmonised auto exposure
White Balance	AWB (Automatic White Balance) co-ordinated with all six cameras for harmonised images
Audio / Microphone Specification	Internal 6 channel, External Stereo Line In Spatial Audio support (Zoom H2n synchronisation)
Stabilisation	6-DoF (Degrees of Freedom) motion sensor
Time Lapse	Default 10 seconds, adjustable
Remote Control	By WiFi up to 20metres through Obsidian APP

Storage / Output

Output Format	Video - MOV, Photo - JPG / DNG
Video Format	Monoscopic / Stereoscopic Equirectangular / Cubemap projection
Recording Media	6 x Micro SD / SDHC / SDXC cards U3 (USH - I) are recommended
Output Compression	H.264 / H.265

Connectivity

ISP	HiSilicon Ultra HD H.264 / H.265 SoC
Camera I/O	1 Gbps Ethernet Input / Output

Power

Consumption	26 Watts (Maximum)
Power	12V Supply / PoE Power Supply DC54V 60W / Battery
Battery	2 x Canon LP-E6N Lithium Ion 10x6x3cm 45g

Physical features

Body Material	Aluminium Magnesium Alloy
Dimensions	145mm diameter x 93mm height (camera)
Weight	1.1 KG
Camera Mount	3/8 & 1/4 UNC Standard tripod mount on bottom
Working Temp.	0 ~ 30°C
Storage Temp.	-40 ~ 80°C
Working Humidity	10 ~ 90% Relative Humidity

Obsidian App.

Control the camera from up to 20m away via iOS and Android app.
View all six cameras live
Set video size and frame rates
Manually adjust video exposure, white balance, time lapse period, etc
External router required and not included with camera

Kandao Studio

Effortless One Click Technology giving Seamless Experience
Immersive 3D Depth
Ambisonic Surround Sound Supported
GPU acceleration speeds up creative workflow
Edit in 2D or 3D modes, and MUCH MORE

Obsidian R System Includes:

Obsidian R Camera with User and Operating Guides
PoE Power Supply PoE Power Cable, Sync cable, Ethernet Cable
Lens Cleaning Cloth
Hard storage case with shoulder strap and foam cut inserts

Accessories from SeeSense

- External Router For current recommendation please contact SeeSense
- Battery Canon LP-E6N (camera requires two)
- Bushman Amarula Carbon VR Tripod
- Bushman 1.9m Coreopole
- Bushman 0.9m Corelite

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



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