

Clifton Cameras Product Specification

DJI Zenmuse H20N Full Spec

General

- **Product Name**
 - Zenmuse H20N
- **Dimensions**
 - 178x135x161 mm
- **Weight**
 - 878±5 g
- **Protection Rating**
 - IP44
- **Laser Safety**
 - Class 1M (IEC 60825-1:2014)
- **Supported Aircraft**
 - Matrice 300 RTK

Gimbal

- **Angular Vibration Range**
 - ±0.01°
- **Mount**
 - Detachable

Zoom Camera

- **Sensor**
 - 1/1.8" CMOS; Effective Pixels: 4M
- **Lens**
 - Focal Length: 6.8-119.9 mm (equivalent: approximately 32.7-574.5 mm)
 - Aperture: f/2.8-f/11 (day); f/1.6-f/11 (night)
 - Focus: 1 m to ∞ (wide); 8 m to ∞ (tele)
- **Focus Mode**
 - MF/AF-C/AF-S
- **Exposure Mode**
 - Manual, Auto
- **Exposure Compensation**
 - ±3.0 (1/3 increments)



- **Metering Mode**
- Spot Metering, Average Metering

- **AE Lock**
- Supported

- **Electronic Shutter Speed**
- Photo: 8-1/8000 s
- Video: 1/30-1/8000 s
- Photo/Video (Night Scene): 1/15-1/8000 s

- **ISO Range**
- Video: 100-102400
- Photo: 100-102400

- **Video Resolution**
- 2688x1512@30fps
- 1920x1080@30fps
- 1920x1080@15fps (Night Scene)

- **Video Format**
- MP4

- **Video Caption**
- Supported

- **Max Image Size**
- 2688x1512

- **Photo Format**
- JPEG

Wide Camera

- **Sensor**
- 1/2.7" CMOS; Effective Pixels: 2M

- **Lens**
- DFOV: 73.6°
- Focal Length: 4.5 mm (equivalent: approximately 29 mm)
- Aperture: f/2.8
- Focus: 1 m to ∞

- **Exposure Mode**
- Auto

- **Exposure Compensation**
- ±3.0 (1/3 increments)

- **Metering Mode**
- Spot Metering, Average Metering

- **AE Lock**



cliftoncameras

- Supported
- **Electronic Shutter Speed**
 - 1-1/8000 s
- **ISO Range**
 - Video: 100-102400
 - Photo: 100-102400
- **Video Resolution**
 - 1920×1080@30fps
- **Video Format**
 - MP4
- **Video Caption**
 - Supported
- **Max. Image Size**
 - 1920×1080
- **Image Format**
 - JPEG

Tele Infrared Thermal Camera

- **Thermal Imager**
 - Uncooled VOx Microbolometer
- **Lens**
 - DFOV: 12.5°
 - Focal Length: 44.5 mm (equivalent: approximately 196 mm)
 - Aperture: f/1.2
 - Focus: 45 m to ∞
- **Equivalent Digital Zoom**
 - 16x, 32x
- **Video Resolution**
 - 640×512@30fps
- **Video Format**
 - MP4
- **Image Resolution**
 - 640×512
- **Image Format**
 - R-JPEG* (16 bit raw included)
- **Pixel Pitch**
 - 12 μm

- **Spectral Band**
- 8-14 μm

- **Sensitivity (NETD)**
- ≤ 50 mK @ f/1.0

- **Temperature Measurement Method**
- Spot Meter, Area Measurement

- **Scene Range**
- -20° C to 150° C (High Gain)
0° C to 500° C (Low Gain)

- **Temperature Alert**
- Supported

- **FFC**
- Auto/Manual

- **Palette**
- White Hot/Fulgurite/Iron Red/Hot Iron/Medical/Arctic/Rainbow 1/Rainbow 2/Tint/Black Hot

Wide Infrared Thermal Camera

- **Thermal Imager**
- Uncooled VOx Microbolometer

- **Lens**
- DFOV: 45.5°
Focal Length: 12 mm (equivalent: approximately 53 mm)
Aperture: f/1.0
Focus: 5 m to ∞

- **Equivalent digital zoom rate**
- 4x

- **Video Resolution**
- 640x512 @ 30 fps

- **Video Format**
- MP4

- **Image Resolution**
- 640x512

- **Image Format**
- R-JPEG (16 bit raw included)

- **Pixel Pitch**
- 12 μm

- **Spectral Band**
- 8-14 μm



- **Sensitivity (NETD)**
- ≤ 50 mK @ f/1.0

- **Temperature Measurement Method**
- Spot Meter, Area Measurement

- **Scene Range**
- -20° to 150° C (High Gain)
- 0° to 500° C (Low Gain)

- **Temperature Alert**
- Supported

- **FFC**
- Auto/Manual

- **Palette**
- White Hot/Fulgurite/Iron Red/Hot Iron/Medical/Arctic/Rainbow 1/Rainbow 2/Tint/Black Hot

Laser Range Finder

- **Wavelength**
- 905 nm

- **Maximum Power**
- 3.5 mW

- **Single Pulse Width**
- 6 ns

- **Measuring Accuracy**
- $\pm (0.2 \text{ m} + \text{target distance} \times 0.15\%)$

- **Measuring Range**
- 3-1,200 m (0.5 x 12 m vertical surface with 20% reflectivity)

Storage

- **Supported microSD Cards**
- Supports a UHS-I Speed Grade 3 microSD card with a capacity of up to 128 GB

- **Supported File System**
- exFAT

Environment

- **Operating Temperature**
- -20° to 50° C (-4 to 122°F)

- **Storage Temperature**
- -20° to 60° C (-4 to 140°F)

