

Clifton Cameras Product Specification

DJI Zenmuse H20 and H20T Full Spec

General

- **Weight**
 - Zenmuse H20: 678±5 g
 - Zenmuse H20T: 828±5 g
- **Dimensions**
 - Zenmuse H20: 150×114×151 mm
 - Zenmuse H20T: 167×135×161 mm
- **Ingress Protection Rating**
 - IP44
- **Operating Temperature**
 - -20° to 50° C (Temperature Measurement is only available between -10° to 50° C)
- **Storage Temperature**
 - -20° to 60° C
- **Laser Safety**
 - Class 1M (IEC 60825-1:2014)
- **Supported Aircraft**
 - Matrice 300 RTK

Gimbal

- **Angular Vibration Range**
 - ±0.01°
- **Mount**
 - Detachable
- **Controllable Range**
 - Pitch: -120° to +30°
 - Yaw: ±320°
- **Mechanical Range**
 - Pitch: -132.5° to +42.5°
 - Yaw: ±330°
 - Roll: -90° to +60°

Zoom Camera

- **Sensor**
 - 1/1.7" CMOS, 20 MP

- **Lens**
- DFOV: 66.6°-4°
Focal length: 6.83-119.94 mm (equivalent: 31.7-556.2 mm)
Aperture: f/2.8-f/11 (normal), f/1.6-f/11 (night scene)
Focus: 1 m to ∞ (wide), 8 m to ∞ (telephoto)

- **Focus Mode**
- MF/AF-C/AF-S

- **Exposure Mode**
- Auto, Manual

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

- **Metering Mode**
- Spot metering, Center-weighted metering

- **AE LOCK**
- Supported

- **Electronic Shutter Speed**
- 1 ~ 1/8000 s

- **ISO Range**
- Video: 100 - 25600
Photo: 100 - 25600

- **Video Resolution**
- 3840x2160@30fps, 1920x1080@30fps

- **Video Format**
- MP4

- **Video subtitles**
- Supported

- **Photo Size**
- 5184 x 3888

- **Photo Format**
- JPEG

Wide Camera

- **Sensor**
- 1/2.3" CMOS, 12 MP

- **Lens**
- DFOV: 82.9°
Focal length: 4.5 mm (equivalent: 24 mm)
Aperture: f/2.8
Focus: 1 m to ∞



- **Exposure Mode**
- Auto

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

- **Metering Mode**
- Spot metering, Center-weighted metering

- **AE LOCK**
- Supported

- **Shutter Speed**
- 1 ~ 1/8000

- **ISO Range**
- Video: 100 - 25600
- Photo: 100 - 25600

- **Video Resolution**
- 1920x1080@30fps

- **Video Format**
- MP4

- **Video subtitles**
- Supported

- **Photo Size**
- 4056 x 3040

- **Photo Format**
- JPEG

Thermal Camera (Zemuse H20T)

- **Sensor**
- Uncooled VOx Microbolometer

- **Lens**
- DFOV: 40.6°
- Focal length: 13.5 mm (equivalent: 58 mm)
- Aperture: f/1.0
- Focus: 5 m to ∞

- **Digital Zoom**
- 1x, 2x, 4x, 8x

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

- **Video Format**
- MP4

- **Image Resolution**
- 640x512

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

- **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**
- -40 °C to 150 °C (High Gain)
- -40 °C to 550 °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 Rangefinder

- **Wave length**
- 905 nm

- **Measurement range**
- 3-1200 m (to a vertical surface with $\geq 12\text{m}$ diameter and 20% reflection rate)

- **Measurement accuracy**
- $\pm (0.2 \text{ m} + D \times 0.15\%)$
D is the distance to a vertical surface

Features

- **Hybrid Optical Zoom**
- 23x (DFOV : 4°, EQV : 556.2mm)

- **Max. Zoom**
- 200x (DFOV : 0.5°, EQV : 4800mm)

- **One Click Capture**
- One click to save the video or picture of 3 cameras (zoom, wide and thermal camera) simultaneously



- **Point to Aim**
- Double click on the wide/thermal camera view, then the system will automatically move the gimbal to focus on the point of interest

- **High-Res Grid Photo**
- Frame an area of interest in wide camera view, and the zoom camera will automatically capture a set of 20 MP images of the area. These images are stored together with an overview image that can be viewed in greater detail.

- **Night Scene**
- Supported (zoom camera)

- **Timestamp**
- Including GPS, date, and time

Storage

- **Supported SD Card**
- MicroSD card (Max capacity: 128 GB, UHS-1 Speed Grade 3 required)

- **Supported File Systems**
- FAT32 (\leq 32 GB), exFAT ($>$ 32 GB)

- **Recommended Micro SD Cards**
- TOSHIBA EXCERIA PRO 32GB micro SD HC II
- SanDisk_Extreme PRO_32GB_3_A1_micro SD V30 HC I
- TOSHIBA EXCERIA PRO 64GB micro SD XC II
- SanDisk_Extreme PRO_64GB_3_A2_micro SD V30 XC I
- SAMSUNG_EVO_128GB_micro SD 3 XC I
- TOSHIBA EXCERIA M303E 32GB micro SD HC I
- TOSHIBA EXCERIA M303E 64GB micro SD XC I
- TOSHIBA EXCERIA M303E 64GB micro SD XC I
- TOSHIBA EXCERIA M303 128GB micro SD XC I
- SAMSUNG_EVO_64GB_micro SD 3 XC I