

ZENMUSE H20T



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 × 3888

Photo Format JPEG

GRIDX
metering and control

ZENMUSE H20T



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

1920×1080@30fps

Video Format MP4

Video subtitles Supported

Photo Size 4056 x 3040

Photo Format JPEG

THERMAL CAMERA (ZENMUSE 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 640×512 @ 30 Hz

Video Format MP4

Image Resolution 640×512

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

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LASER RANGEFINDER

Wave length

905 nm

Measurement range

3-1200 m (to a vertical surface with ≥ 12 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

23 \times (DFOV: 4 $^\circ$, EQV: 556.2mm)

Max. Zoom

200 \times (DFOV: 0.5 $^\circ$, 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 (≤ 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

GRIDX
metering and control