

## KT-UH43DF/DH

### 12X/20X Ultra HD PTZ Camera

4K 30FPS

12X/20X Optical Zoom

USB3.0+HDMI+LAN+3G-SDI

AI Tracking

Auto Framing



## Features

### ■ 4K30 Ultra HD Smooth Video Output:

SONY 1/2.8-inch 8.29 million pixel high-quality image sensor, it can achieve a maximum of 3840x2160 30FPS ultra-high resolution and high frame rate quality images.

### ■ 12x, 20x Optical Zoom Lens:

UH43DF: 12x optical zoom, 72.5 distortion-free horizontal viewing angle.

UH43DH: 20x optical zoom, 58.7 distortion-free horizontal viewing angle.

Meet more scenes such as live broadcast of large-scale auditorium meetings, blackboard writing in lecture theaters, and other real-life details.

### ■ USB3.0+HDMI+LAN+3G-SDI full interface, rich application scenarios :

USB3.0+HDMI+LAN+3G-SDI all-in-one interface setup. USB3.0+HDMI supports 4K30 Ultra HD video output, while LAN+3G-SDI supports 1080p60 resolution output. All interfaces can be used simultaneously.

### ■ Low light:

The new ultra-high signal-to-noise ratio CMOS image sensor can effectively reduce image noise under low-light conditions. At the same time, 2D & 3D digital noise reduction is applied to significantly reduce image noise. Even under ultra-low light conditions, the image can still be kept clean and clear, and the image signal-to-noise ratio is higher than 50dB.

### ■ Remote control:

Multiple cameras can be controlled using RS232 and RS485 serial ports.

**Infrared transparent transmission :**

In addition to receiving its own dedicated remote control signal, it can also receive users' infrared remote control signals and send them to the video conferencing terminal through the RS232 IN port.

**Contains multiple control protocols :**

various control protocols such as VISCA, PELCO P/D, and Onvif, and supports automatic identification protocols.

**Multiple video compression standards:**

Different interfaces support multiple video compression formats such as YUY2, H.265, MJPG, and H.264.

**Multiple network protocols**

Supports ONVIF, SRT, RTSP, RTMP, RTMPS and other network protocols.

**Multiple control protocols**

Supports VISCA (including VISCA Over IP), PELCO P/D protocols, and automatic identification protocols.

**Various installation methods**

Multiple installation methods, can be installed on desktop, ceiling, or wall.

**New generation AI human tracking algorithm:**

Supports AI tracking and Auto framing functions.

(\*Note: Note: With AI intelligent tracking and automatic framing enabled, USB3.0 supports 4K30 resolution output, HDMI+IP supports 1080p60 resolution output, and 3G-SDI has no video output. All three interfaces can output simultaneously.)

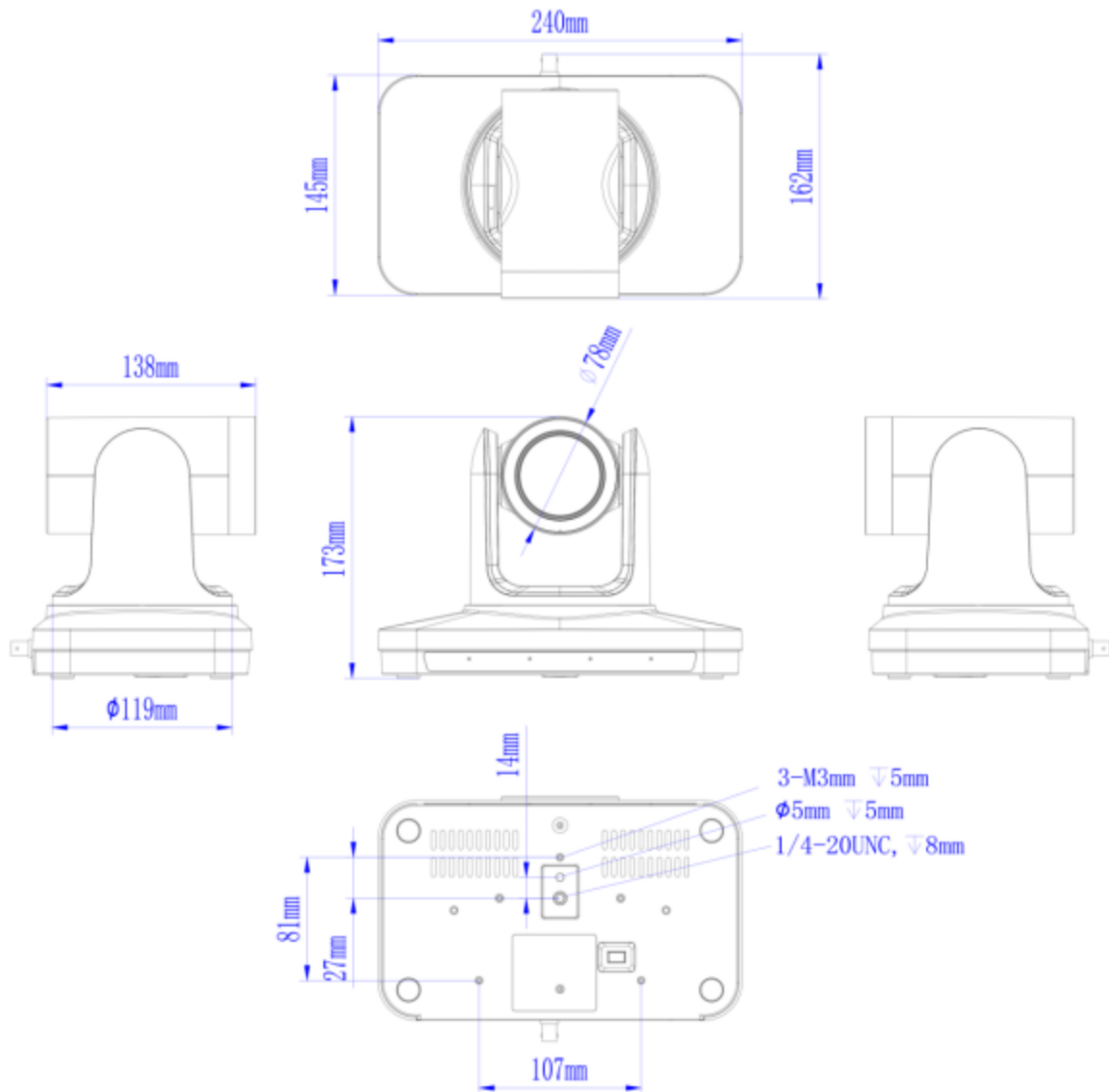
## Camera parameters

| Image Parameters      |                                                                                                                                       |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Resolution            | HDMI: 4K30/25, 1080p60/59.94/50/30/29.97/25, 720p60/50<br>SDI: 1080p60/59.94/50/30/29.97/25, 720p60/50                                |
| Image Sensor          | SONY 1/2.8 inch CMOS                                                                                                                  |
| Pixel                 | 8.50 Megapixels, 8.29 Effective Megapixels                                                                                            |
| Scan Mode             | Line by line                                                                                                                          |
| Lens                  | UH43DF: 12X optical zoom, f=4.1mm (W) ~ 49.2mm (T), F1.8~F2.68<br>UH43DH: 20X optical zoom, f=5.33mm (W) ~ 92.6mm (T),<br>F1.55~F3.13 |
| Digital Zoom          | 16X                                                                                                                                   |
| Horizontal View Angle | UH43DF: 72.5°(W)~6.57°(T)<br>UH43DH: 58.7°(W)~3.2°(T)                                                                                 |
| Vertical View Angle   | UH43DF: 42.06°(W)~3.76°(T)<br>UH43DH: 32.2°(W)~1.8°(T)                                                                                |

|                         |                                                                                                                   |
|-------------------------|-------------------------------------------------------------------------------------------------------------------|
| Focus System            | Auto, Manual                                                                                                      |
| Shutter Speed           | 1/25s ~ 1/10000s                                                                                                  |
| Minimum illumination    | UH43DF: 0.1 Lux @ (F1.8, AGC ON)<br>UH43DH: 0.1 Lux @ (F1.5, AGC ON)                                              |
| Exposure                | Auto, manual, aperture priority, shutter priority, brightness priority                                            |
| White Balance           | Automatic, indoor, outdoor, keyed, automatic tracking, manual                                                     |
| Backlight Compensation  | Support                                                                                                           |
| Digital Noise Reduction | 2D&3D digital noise reduction                                                                                     |
| S/N Ratio               | ≥50dB                                                                                                             |
| <b>Pan/Tilt</b>         |                                                                                                                   |
| Pan Angle               | ±168°                                                                                                             |
| Tilt Angle              | -30°~+90°                                                                                                         |
| Pan Speed               | 1°~90°/s                                                                                                          |
| Tilt Speed              | 1°~90°/s                                                                                                          |
| Preset Positions        | 9 preset positions by IR remote controller, 255 preset positions by joystick controller                           |
| Preset Accuracy         | 0.1°±10%                                                                                                          |
| Flip                    | Support                                                                                                           |
| Image freeze            | Support                                                                                                           |
| <b>AI</b>               |                                                                                                                   |
| AI Tracking             | Support                                                                                                           |
| Auto Framing            | Support                                                                                                           |
| Tracking Size           | Support                                                                                                           |
| Tracking Sensitivity    | Support                                                                                                           |
| AI Guard Position       | Support                                                                                                           |
| <b>USB</b>              |                                                                                                                   |
| Protocol                | UVC 1.1                                                                                                           |
| Operating System        | Window7 and above, MacOS, Linux, Android                                                                          |
| Video Compression       | YUY2, MJPEG                                                                                                       |
| Resolution              | 3840*2160, 2560*1440, 1920*1080, 1280*720, 960*540, 800*600, 720*576, 720*480, 640*480, 640*360, 352*288, 320*240 |
| Frame Rate              | Max.30                                                                                                            |
| UVC Control             | Support                                                                                                           |
| <b>LAN</b>              |                                                                                                                   |
| Protocol                | TCP/IP, HTTP, RTSP, RTMP, RTMPS, SRT, Onvif, DHCP, VISCA Over IP                                                  |
| Video Compression       | H.264, H.265                                                                                                      |
| Code Stream             | Main stream *1, auxiliary stream *1                                                                               |

|                               |                                                                                                                                                                                           |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Main stream resolution        | 1920*1080                                                                                                                                                                                 |
| Sub Stream Resolution         | 640*480, 640*360, 480*360, 352*288, 320*240, 176*144                                                                                                                                      |
| Bitrate Control               | variable code rate, fixed code rate                                                                                                                                                       |
| <b>Audio</b>                  |                                                                                                                                                                                           |
| Audio Compression             | AAC                                                                                                                                                                                       |
| Audio Bit Rate                | 128kbps                                                                                                                                                                                   |
| <b>Interface</b>              |                                                                                                                                                                                           |
| HDMI Interface                | 1 Line, HDMI: Version 1.4                                                                                                                                                                 |
| SDI Interface                 | 1 Line, 3G-SDI                                                                                                                                                                            |
| USB Interface                 | 1 Line, USB3.0, Type-B Socket<br>1 Line, USB2.0 extensional in, Type-A Socket                                                                                                             |
| Network Interface             | 1 Line, RJ45: 10M/100M adaptive Ethernet port                                                                                                                                             |
| Audio Interface               | 1 Line, Line In, 3.5mm                                                                                                                                                                    |
| Serial Interface              | 1 Line, RS232 IN/Out: 8-Pin Mini Din, up to 30 meters, VISCA/Pelco-D/Pelco-P Protocol.<br>1 Line, RS422/485: 3-Core Phoenix Interface, up to 1200 meters, VISCA/Pelco-D/Pelco-P Protocol. |
| Power Interface               | JEITA RC-5320A Type 4                                                                                                                                                                     |
| <b>General Specifications</b> |                                                                                                                                                                                           |
| Input Voltage                 | DC 12V                                                                                                                                                                                    |
| Input Current                 | Max. 1.5A                                                                                                                                                                                 |
| Power consumption             | Max. 18W                                                                                                                                                                                  |
| Operating Temperature         | 0~40℃                                                                                                                                                                                     |
| Storage Temperature           | -10~60℃                                                                                                                                                                                   |
| Color                         | black                                                                                                                                                                                     |
| Dimension                     | (W)240*(D)162*(H)173mm                                                                                                                                                                    |
| Weight                        | 1.2kg                                                                                                                                                                                     |
| Accessories                   | DC 12V power adapter, IR Remote, User manual, USB3.0 Cable, RS-232C Cable, Ceiling bracket, Wall bracket(Optional)                                                                        |

## Dimensional wireframe



## Application scenarios



## Connection diagram

