UV490D3

Information communication HD camera series has perfect function, excellent performance, rich interface; advanced ISP processing technology and algorithms, making the image effect vivid and realistic, uniform picture brightness, strong sense of light and color layers, high definition, good color reproduction. Support H.265/H.264 coding, which makes the picture smoother and clearer under low bandwidth.

- **Integrated design:** Built-in panoramic camera realizes the integrated fusion of panoramic camera and tracking camera.
- **Adjustable Lens Viewing Angle:** The panoramic camera lens viewing angle is adjustable (-15°~ +15°), which greatly facilitates engineering installation and commissioning.
- **4K Ultra HD Image:** Adopting 8.42 megapixel high-quality SONY CMOS image sensor, the maximum resolution is up to 4K (3840*2160), and the frame rate of 4K output is up to 30 frames/second. Presenting clear and lifelike Ultra HD video that vividly shows characters' expressions and movements, it delivers image quality with superb clarity and resolution.
- **Optical Zoom Lens:** 12X 80° optical zoom lens.
- **Leading Auto Focus Technology:** Advanced auto focus algorithm makes the lens fast, accurate and stable to complete auto focus.
- **Low Noise & High Signal-to-Noise Ratio:** Low noise CMOS effectively ensures the ultra-high signal-to-noise ratio of the camera video. The use of advanced 2D, 3D noise reduction technology to further reduce the noise, while ensuring image clarity.
- **Multiple Video Output Interfaces:** Support HDMI, USB3.0, wired LAN interface; support POE+ power supply, USB3.0 support dual stream.
- **Multiple Video Compression Standards:** Support YUY2, MJPEG, H.264, H.265, NV12 video coding format, MJPEG, H.264, H.265 support up to 3840 * 2160 resolution 30 frames per second compression;
- **Audio Input Interface:** Support AAC audio coding, AAC coding support 16000, 32000, 44100, 48000 sampling frequency.

- **Built-in Gravity Sensor:** Built-in gravity sensor, support the PTZ automatic flip function, convenient for engineering installation.
- **Multiple Network Protocols:** Support ONVIF, GB/T28181, RTSP, RTMP, VISCA OVER IP, IP VISCA, RTMPS, SRT protocols; support RTMP push mode, easy to link to streaming media server (Wowza, FMS); support RTP multicast mode.
- **Multiple Control Protocols:** Supports VISCA, PELCO-D, PELCO-P protocols, supports automatic protocol recognition.
- **Super Silent PTZ:** Adopts high precision stepping motor and precision motor drive controller to ensure the PTZ running smoothly at low speed and no noise.
- **Multiple Presets:** Support up to 255 presets (10 for remote control setting call).
- **Multiple AI Tracking Modes:** Support four tracking modes: real-time tracking, stage tracking, regional tracking and intelligent framing. Built-in ReID Pedestrian Recognition technology can accurately recognize the speaker's body type, appearance, clothing and other information, once the tracking target is locked, it will not be interfered by other moving targets, so it can accurately lock the target of the follow up shooting.
- **Intelligent Framing:** Built-in high-speed processor as well as built-in face detection algorithm automatically detects participants and provides ideal framing.
- **Intelligent Voice Location Tracking:** Built-in 6 omni-directional mike arrays and intelligent sound source localization algorithms can locate the speaker's position in real time.
- **Many Application Places:** Remote education, teaching recording and broadcasting, conference system, remote training, remote medical care, court hearing system, emergency command system, etc.

Technical Specification

Figure1-1 Camera Lens Parameters

Parameters/ Models	UV490D3
Camera Lens Parameters	
Image Sensor	1/2.8 inch high quality CMOS sensor
Effective Pixel	8.42M, 16:9
Video Signal	**Webstreaming:** Close-up H264/H265:3840*2160/2592*1944/2304*1296/1920*1080/1280*720@30/25/20/15/10/5fps; Panorama H264/H265:1920*1080/1280*720@30/25/20/15/10/5fps; **USB:** Close-up YUY2/NV12: 1920*1080/1280*720/1024*576/800*600/800*448/640*480/640*360/480*270/320*180P30/25/20/15/10/5 H264/H265/MJPG: 3840*2160/1920*1080/1600*896/1280*720/1024*576/960*540/800*

	600/800*448/720*576/720*480/640*480/640*360/480*270/352*288/320*240@30/25/20/15/10/5fps Panorama YUY2/NV12: 1920*1080/1280*720/1024*576/800*600/800*448/640*480/640*360/480*270/320*180P30/25/20/15/10/5 H264/H265/MJPG: 1920*1080/1600*896/1280*720/1024*576/960*540/800*600/800*448/720*576/720*480/640*480/640*360/480*270/352*288/320*240@30/25/20/15/10/5fps **HDMI:** Close-up 3840*2160/1920*1080P30/29.97/25; 720P60/59.94/50 Panorama 1920*1080P30/29.97/25; 720P60/59.94/50 **SDI:** Close-up/ Panorama 1920*1080P30/29.97/25; 1920*1080I30/29.97/25; 1280*720P60/59.94/ 50
Close-up Lens	12X
Viewing Angle	H:8°（N）~80°（W）
Iris Value	F1.8 ~ F2.68
Digital Zoom	10 X
Minimum Illumination	0.5Lux(F1.8, AGC ON)
DNR	2D & 3D
White Balance	Auto/Manual/One-Key White Balance/Specified Color Temperature
Focus Mode	Auto/Manual/One-Click Focus
Exposure Mode	Auto, Manual, Shutter Priority, Aperture Priority, Brightness Priority
Iris	Auto/Manual
Shutter Speed	1/25~1/10000
BLC	On/Off
Dynamic Range	Off, 1 ~ 8
Video Adjustment	Brightness, Chroma, Saturation, Contrast, Sharpness, Gamma Curve
SNR	>50dB
Panoramic Camera	
Image Sensor	1/2.8 inch high quality CMOS sensor
Effective Pixel	842M, 16:9
Lens Parameters	Fixed focal length lens, horizontal field of view: 110°, aperture: F=2.2, focal length: f=2.03mm, Lens angle of view can be adjusted by ±15°

Figure 1-2 Interface Functions and Performance Parameters

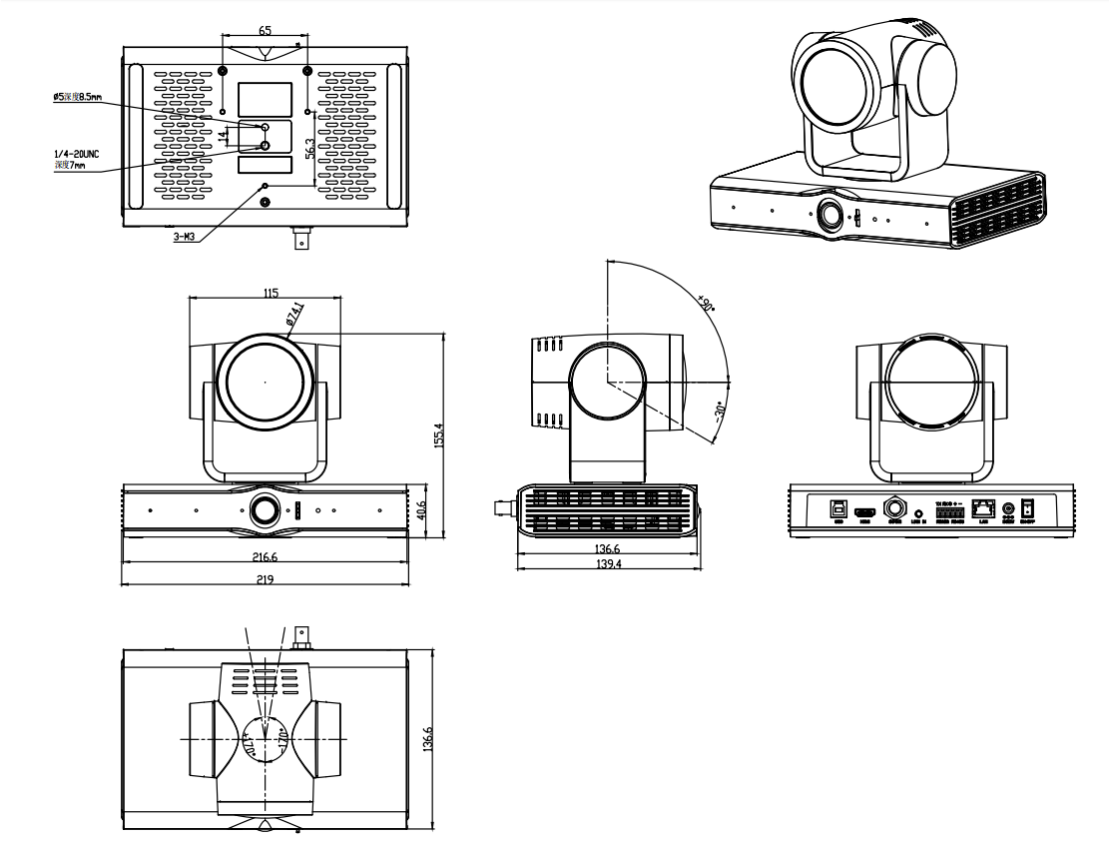
Interface	
Back Panel	HDMI, SDI, LAN(Support POE+), USB3.0, LINE-IN, RS485/RS232
Video Output	HDMI, SDI, LAN, USB3.0
Video Compression Format	LAN Support: H.264, H.265 USB 3.0: YUY2, NV12
Audio Input	Dual 3.5mm linear inputs
Audio Output	HDMI, SDI, LAN, USB3.0
Audio Compression Format	AAC
LAN Port	10M/100M/1000M adaptive Ethernet port, support POE+ power supply, support audio and video outputs
Network Protocols	RTSP, RTMP, ONVIF, GB/T28181, VISCA OVER IP, IP VISCA, RTMPS, SRT, support remote upgrade, remote reboot, remote reset
Control Interface	RS232, RS485, LAN
Control Protocols	VISCA/Pelco-D/Pelco-P;Baud rate support 115200/38400/9600/4800/2400
USB Communication Protocols	UVC（video communication protocol，UAC（audio communication protocol）
Power Supply	HEC3800 Power Socket (DC12V)
Power Adapter	Input AC110V~AC220V; Output DC12V/2.5A
Input Voltage	DC12V±10%
Input Current	2A（MAX）
Power Consumption	24W（MAX）
Dimension	219mm*136.6mm*155.4mm

Figure1-3 PTZ Parameters

PTZ	
Pan	-170°~+170°
Tilt	-30°~+90°
Pan Speed	0.1 ~60°/s
Tilt Speed	0.1~45°/s
Preset Speed	Horizontal: 60°/s, Tilt: 45°/s
Preset Quantity	Up to 255 user programmable presets (10 for remote control)

Figure1-4 Other Parameters

Others

Storage Temperature	-10℃~+70℃
Storage Humidity	20%~95%
Working Temperature	-10℃~+50℃
Working Humidity	20%~80%
Weight(Approx.)	1.58kg
Environment	Indoors

Dimension