

UH7510-30 4K Broadcast-Grade PTZ Camera

30X Optical Zoom | 4K 60fps | AI Tracking | Gesture Recognition

Free-D | PoE+ | NDI®|HX3（optional） | OLED Display | Privacy Mask

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





Core Performance

4K 60fps video

Features a 1/1.8-inch Sony CMOS sensor for superior performance in various lighting conditions.Delivers up to 4K60 video output for exceptionally vivid and dynamic detail.



Free-D

Built-in Free-D protocol outputs real-time spatial data, enabling dynamic camera angle control for virtual production and AR applications.



Optical&digital zoom

30x optical zoom and 16x digital zoom with a 59° horizontal view, ideal for capturing fine details in large venues and classrooms.



NDI®|HX3 Protocol

Supports NDI®|HX3 for transmitting HD video, audio, and control signals over a single network cable with low latency.



Multiple output interfaces

Supports HDMI, LAN, USB 3.0 and 3G-SDI outputs. The HDMI + LAN + USB interfaces can output 4KP60 resolution, while the 3G-SDI interface can output 1080P60 resolution.



AI tracking

Multi-mode AI algorithm tracks people and gestures for automatic framing, reducing manual operation in lectures, meetings, and classrooms.



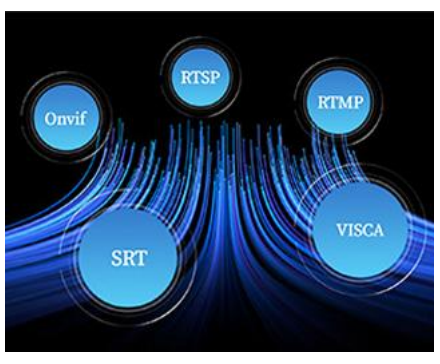
Privacy Mask

Real-time multi-face detection with automatic mosaic masking for head areas when required.



Multi-format encoding and multi protocol support

Supports YUY2, MJPG, H.264/H.265 encoding & ONVIF, SRT, RTSP, RTMP(S), FreeD protocols for live streaming & production. Auto-detects VISCA, ONVIF, PELCO P/D, NDI for easy integration & unified control.



Product Specifications

Camera parameters

Sensor		1/1.8-inch SONY CMOS sensor, approximately 8.29million effective pixels
Zoom	Optical zoom	30X
	Digital zoom	16X
Lens		f=6.91(wide)~214.64mm(tele)，F1.35~F4.6
Horizontal field of view		59°（W)~1.98°（T)
Vertical field of view		34.14°（W)~1.12°（T)
Output format	HDMI	3840*2160　p60/59.94/50/30/29.97/25；1920*1080 p60/59.94/50/30/29.97/25；1280*720 p60/50；1920*1080 i60/59.94/50
	3G-SDI	1920*1080　p60/59.94/50/30/29.97/25；1280*720 p60/50；1920*1080　i60/59.94/50
	USB	MJPEG: 3840*2160, 2560*1440, 1920*1080, 1280*720, 960*540,640*360, 480*270, 384*216, 320*180, 256*144
		YUY2:　1280*720, 960*540, 640*360, 480*270, 384*216, 320*180, 256*144
		NV12:　960*540, 640*360, 480*270, 384*216, 320*180, 256*144
	USB Frame Rate	60fps

Gimbal

Preset	Remote controls: 10, Keyboards: 255, Accuracy: 0.1° ±10%
Gimbal Acceleration Curve	Gentle，Standard，Swift
Horizontal rotation angle	-171°～ +171°
Vertical rotation angle	-90°～ +90°
Horizontal rotation speed	0.01°～ 180°/S
Vertical rotation speed	0.01°～ 180°/S

Image Parameters

Noise reduction	2D & 3D
Exposure	Automatic, Manual, Aperture Priority, Shutter Priority
White Balance	Auto, Indoor, Outdoor, One-touch White Balance, Auto Tracking, Manual, Color Temperature
Low light	0.1Lux
Anti-flicker	Off,50Hz,60Hz
Focusing method	Automatic, Manual
Gamma	Standard, Linear, Pattern, Custom
Inversion/Image Freeze	Support
Backlight compensation	Support
Flip/Mirror	Support
Defog	Support
Shutter	1/50S ～ 1/10000S
S/N Ratio	⩾50dB

Online streaming

Video encoding format	H.264, H.265,MJPEG
Rate Control	Variable bit rate, constant bit rate
Bitrate	Stream0　3840*2160, 1920*1080, 1280*720
	Stream1　640*360
	Stream2　1920*1080, 1280*720
Frame Rate	30fps-60fps
Supported Protocol	TCP/IP, HTTP, RTSP, RTMP(S), SRT, ONVIF, DHCP, VISCA Over IP, Free D，NDI（optional）

Audio information

Compression Standard	AAC
Audio Bitrate	128kbps

AI composition

Smart Tracking	Single-person tracking, multi-person tracking, Zone tracking, hybrid tracking, gesture recognition
Gesture Recognition	AI On，AI Off，Switch Target,Zoom In，Zoom Out
Composition size	Half body / Full body
Composition mode	Custom, Center, Left, Right
Composition position	Current position, preset position, initial position
Pan Lock	Support(Only Single-person tracking)
Tilt Lock	Support(Only Single-person tracking)
Zoom Lock	Support(Only Single-person tracking)

Input/Output

HDMI port	HDMI: Version 2.0 *1 channel
USB port	USB 3.0, Type-B port *1 channel
SDI port	3G-SDI*1 channel
Communication Interface	RS422:9 Phoenix connector,maximum distance 1200 meters，VISCA/Pelco-D/Pprotocol *1 channel；　RS232 IN/OUT: 8-pin mini DIN, maximum distance 30 meters, VISCA/Pelco-D/P protocol *1 channel
Network Interface	RJ45: 1000M adaptive Ethernet port ×1 channel (Supports PoE+ (IEEE 802.3at))
Audio Interface	3.5mm Line In audio port ×1 channel
Power connector	IEC 60130-10 Type A

Basic Parameters

Input voltage	DC 12V
Input current	Up to 1.5A
Operating Temperature	0～40℃
Storage Temperature	-10～60℃
Power consumption	Up to 18W
Color	Black
Specifications	158*190*225mm

Weight	1.9KG
Accessory List	DC12V power adapter、IR remote control、user manual、HDMI cable (optional)、HDMI bracket、USB 3.0 video cable、wall mount/ceiling mount bracket (choose one of the two)

Interface Diagram



Structural dimensions

