

datavideo



4K 20x Tracking PTZ Camera
PTC-305/ PTC-305T/ PTC-305G

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4K 20x Tracking PTZ Camera

Brand New 4K Auto tracking PTZ Camera

The PTC-305 series is equipped with a 1/1.8" CMOS lens featuring 20x optical zoom, making it suitable for applications such as auditoriums, classrooms, and conference halls. The PTC-305 includes an Auto Tracking (AT) system and can also be controlled using a professional camera controller or remote control, delivering smooth and natural camera movements similar to those of a cameraman.

The HDMI output supports 4K-50/60P format with YUV 4:2:2 color sampling, and it also has simultaneous 3G-SDI video output. In addition, it features built-in H.264, H.265, and Motion JPEG encoding, allowing real-time live streaming to two platforms with just one unit, enabling both on-site and online live playback. For audio, it supports 3.5mm microphone and line-in audio inputs, with mixing control and settings adjustable directly via the web UI interface to meet live sound requirements.

The PTC-305 series fully complies with the ONVIF Profile S standard, ensuring compatibility and interoperability in various network video environments. For power input, it also supports PoE, allowing dual-mode power supply, which is ideal for system installation and on-site wiring configuration.

To meet different workflow needs, Datavideo offers multiple models, including the PTC-305T 4K HDBaseT version for long-distance high-quality signal transmission and the PTC-305G with 12G-SDI output for professional-grade video production requirements. Users can flexibly choose according to their actual working environment and personal preferences to achieve the desired shooting effect. Additionally, the PTC-305 and PTC-305G cameras support NDI functionality.

PTC-305T





PTC-305/ PTC-305T/ PTC-305G

- 2160p50/59.94/60 PTZ camera
- Supports Auto tracking function
- 1/1.8" CMOS
- 20x Optical Zoom, 16x Digital Zoom
- Video Output: 4K HDMI, 3G-SDI, 12G-SDI (PTC-305G),
IP streaming (H.264 & H.265), HDBaseT (PTC-305T)
- 2160p and 1080p (3G-SDI) Simultaneous video output
- Excellent low light performance (0.5 Lux @ F1.8, AGC ON)
- RS-422 Serial Control
- DVIP (Datavideo Proprietary Protocol) Control
- Supports Sony VISCA via browser and VISCA over IP Protocol
- External audio input: 3.5mm audio in (mic in or line in)
- User friendly web UI via browser & app (iOS and Android)
- Dual streaming: 2160p and 480p simultaneously
- The PTC-305 and PTC-305G cameras support NDI | HX3 and NDI | HX2 technology.
- Compliant with the ONVIF Profile S standard.
- Support DC and POE power supply

deo

PTC-305

PTC-305 SERIES



PTC-305

NDI HX3



PTC-305T

HDBaseT



PTC-305G

12G

NDI HX3





Quick Access to Camera's Auto tracking

You will be allowed direct access to auto tracking via various external controllers such as the supplied RMC-1AT remote control and DVIP controllers (RMC-300A, PTC View Assist, etc.)

In addition to camera controllers, you can also easily enable auto tracking on smart switchers which include KMU-200, SHOWCAST 100, etc as well as complete solution systems like ZR-1 Hybrid Video Production Solution.



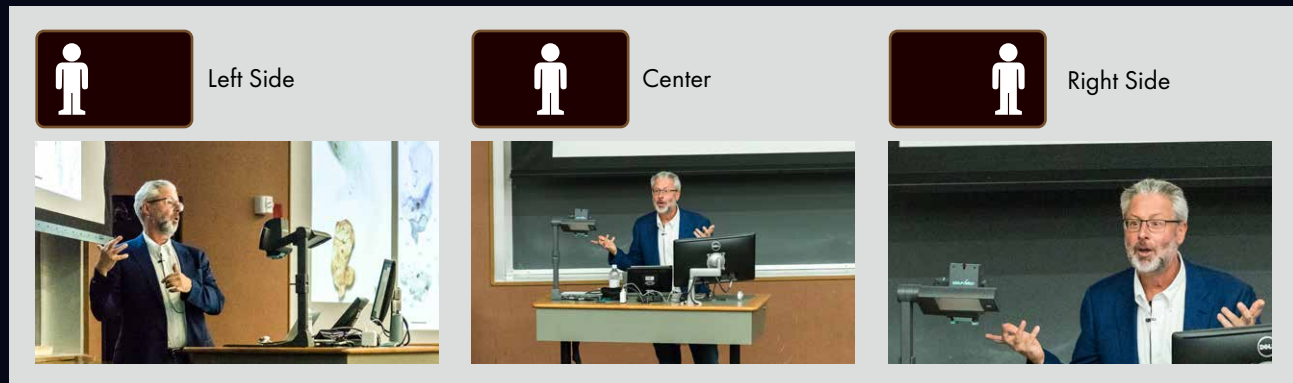
Custom AI Object Tracking

If you are filming multiple people, you can designate a person for Auto tracking. Once linked to the camera, only the designated person will be tracked, avoiding interferences such as the desks, people coming back and forth, large objects, etc.



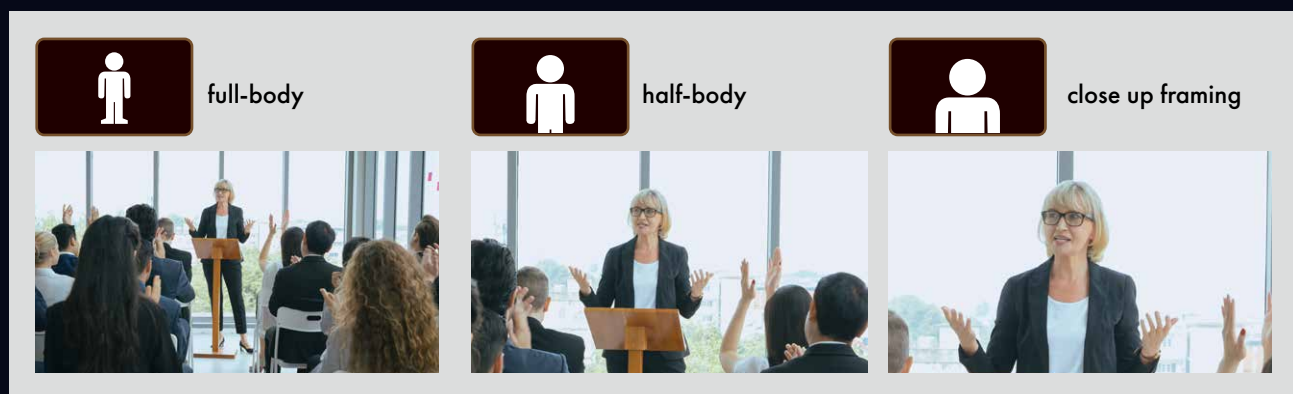
Talent Position: Center / Left Side / Right Side

The positioning of talent depends on the videographer's creativity and intent rather than strict rules. Different positions can convey various emotions, messages, or visual effects. A centered composition provides a sense of stability and balance, suitable for scenes that require highlighting the main subject. Videographers may also place the talent on the left third or right third of the frame, leaving adequate space in the foreground to showcase the talent's sight direction or potential future possibilities.



Quick Access to Framing Options

All of the PTC-305 camera series include RMC-1 controller. User can quickly select full-body, half-body and close up framing, making it easy to change the shooting scene and framing requirements.



Smart PTZ Speed Adaptation

The integrated PID algorithm is able to detect the movement speed of the identified object and automatically adjust the camera's corresponding pan, tilt and zoom speeds in such a way that the lens movement will be smooth, avoiding common camera lens movement problems like jerky movements or unpredicted halts.



Various Control Options

Control real-time pan, tilt, and zoom camera movements with Datavideo PTZ View Assist APP, RMC-300A and RMC-180 series. With configurable preset positions supported.



SHOWCAST 100



PTZ View Assist



RMC-180 MARK II



RMC-300A

Multiple simultaneous video output

Supports simultaneous HDMI 2.0 output up to 2160p 50/60 and also 3G-SDI output up to 1080p60/50.



streaming

4K HDMI

3G-SDI

Supports 12G-SDI Output

The PTC-305G is equipped with a 12G-SDI input/output port, specifically designed to deliver ultra-high-definition 4K SDI video content, ensuring detailed and smooth images. It is also seamlessly compatible with other professional broadcast-grade 12G-SDI devices, creating an integrated, high-standard video production experience.

12G



Multiple Network Protocol with Dual Stream function

Support RTSP and RTMPS protocols, easy to stream directly to two different CDN platforms and Datavideo dvCloud as well.



One Ethernet Cable with NDI® | HX Technology

There is no need for multiple cables and complicated setup. Single-wire concept helps you to transfer video, audio, power, tally, and control over only one Ethernet cable.

Power Over Ethernet (PoE)

functionality allows you transmit all the information and power over only one cable. NDI® is a registered trademark of Newtek, Inc.

NDI HX3

NDI® Virtual Input

PTC-305 as an video input source can be applied to various platforms: Skype, GoToMeeting, WebEx, Zoom, and more.



Broadcast quality 4K HDMI / 3G-SDI PTZ camera

Resolution is up to 2160p 50/60.
20x optical zoom for PTC-305 series which you a high quality video.



Low Noise in low light CMOS effectively ensures high SNR of video quality.

Advanced 3D noise reduction technology is also used to further reduce the noise while ensuring image sharpness.



RS-422, DVIP and Ethernet Camera Control

RS-422 and ethernet to use DVIP or VISCA over IP commands to integrate with larger control systems.



Compliant with the ONVIF Profile S standard

The PTC-305 series cameras are compliant with the ONVIF Profile S standard, ensuring seamless integration and interoperability in network video systems.



Supports H.264/H.265 video compression

Support compression of resolution up to 3840x2160 with frame up to 59.94, 60fps and the second channel 720x480p compression. AAC, MP3 and PCM audio compression also supported.



Tally Light

Green and red tally lights to show the preview and program status for broadcast applications.





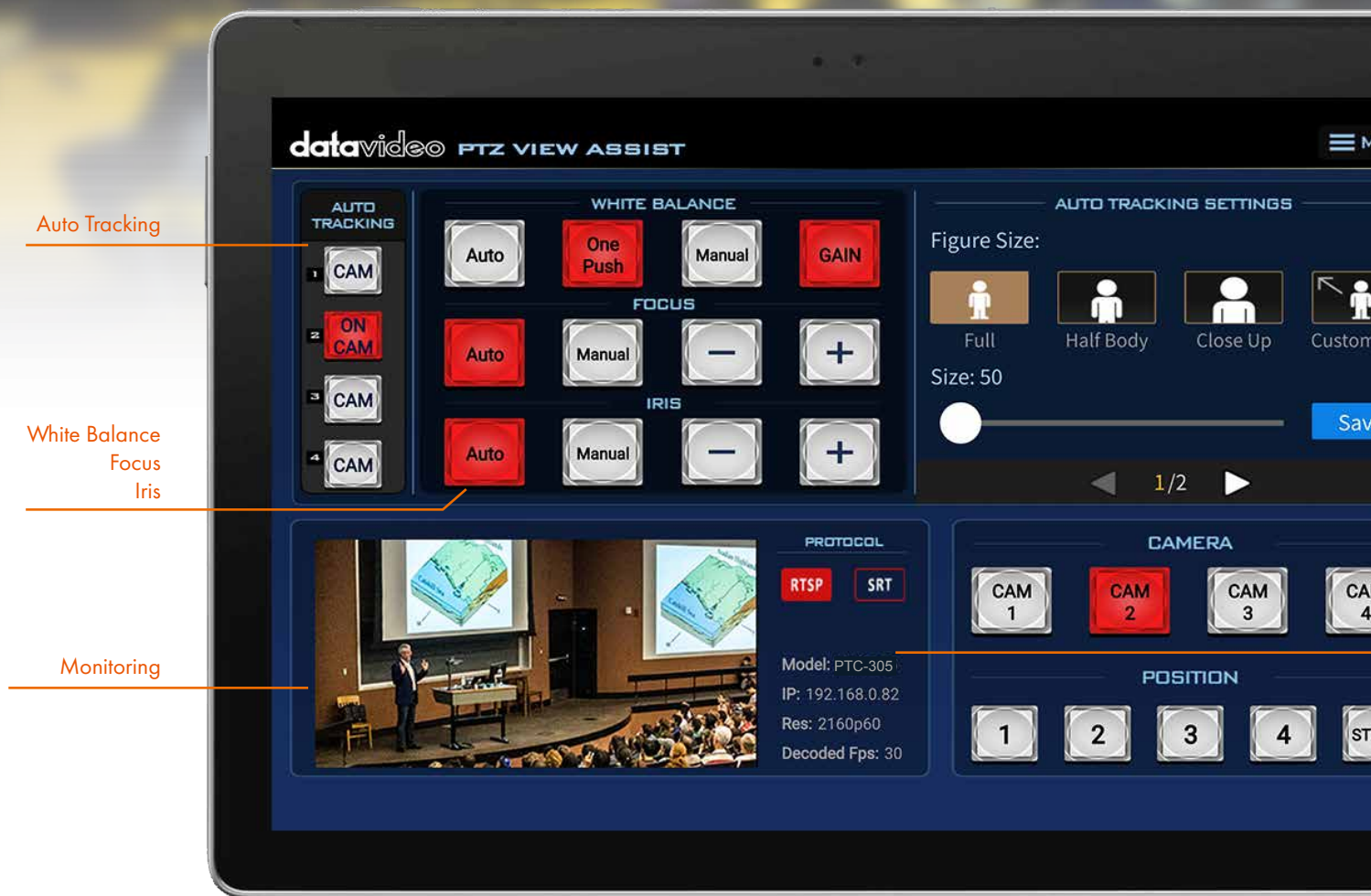
Simply enable Auto tracking
with your IR remote control



RMC-1AT PTZ Controller

All you need is a remote control to set and control all four cameras and save the four presets.





PTZ View Assist

Control up to four cameras with your Tablet

The camera control app is tailored for the Datavideo PTZ camera series. It can monitor the live streaming video from PTC-140, PTC-145, PTC-280, PTC-285, PTC-300 and PTC-305 series. The app can control up to 4 cameras simultaneously via DVIP, you can intuitively set up and recall the presets, and adjust white balance, focus, and IRIS. The app can decode the live streaming via RTSP and SRT, easily monitor the live streaming video and set up the parameters promptly in one application. Datavideo provides iOS and Android versions, you can download on Google Play and App Store for free!





Camera Control

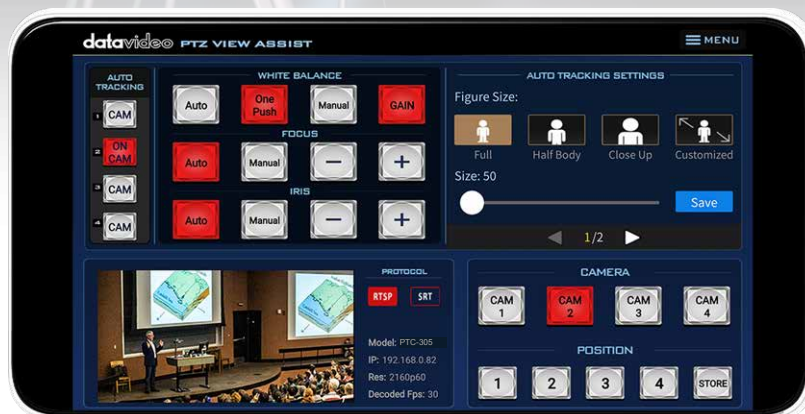
Camera

Protocol

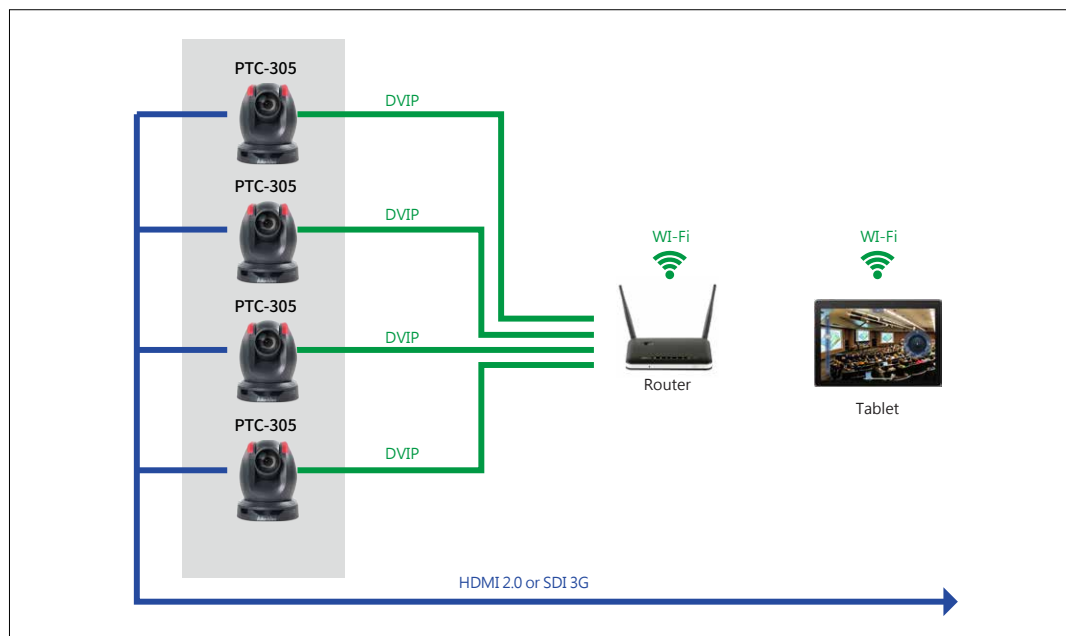
Position



Mobile phone version available soon

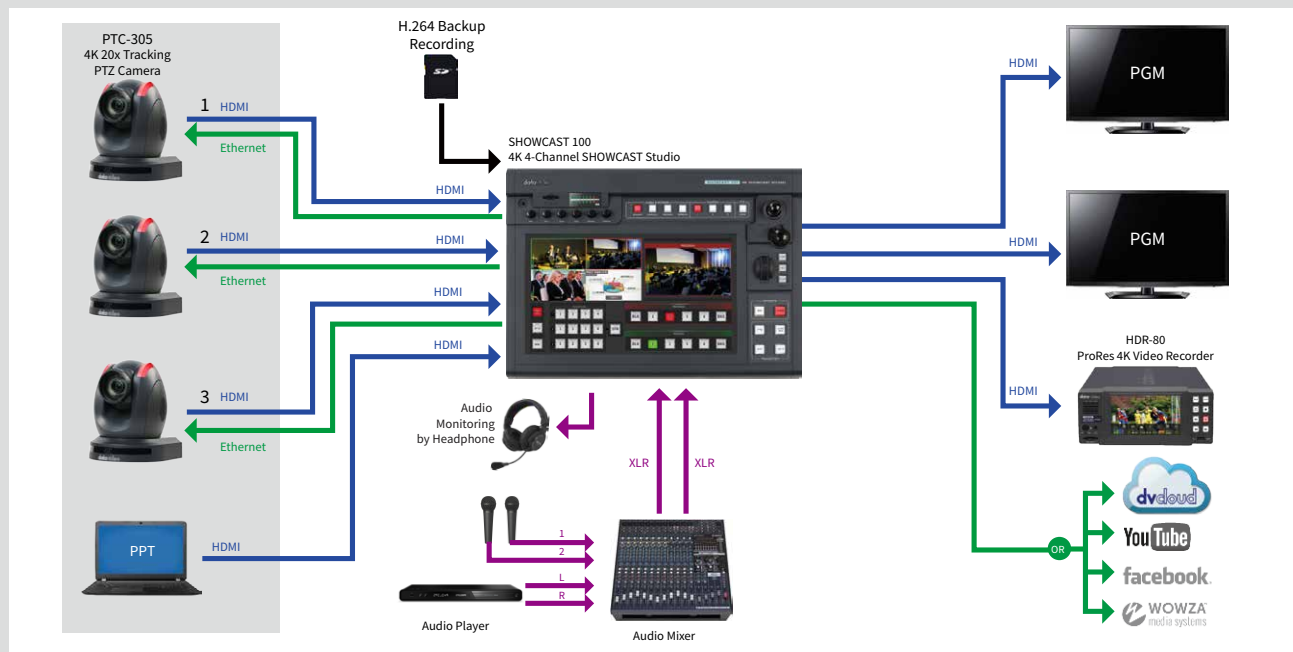


Camera control via web UI APP control

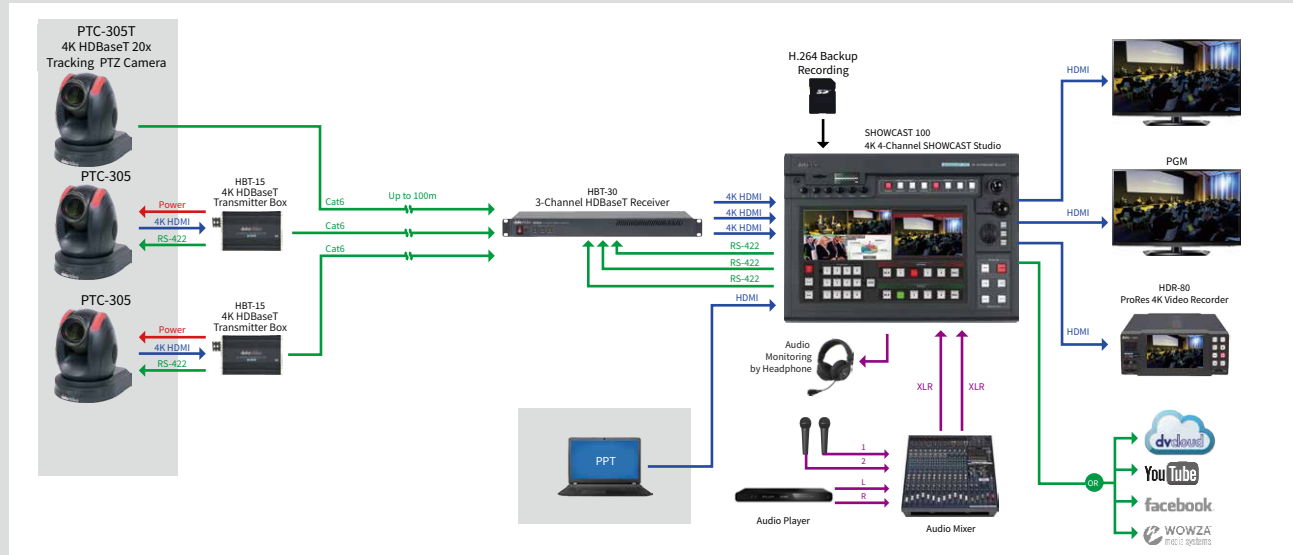


The camera control app is able to control datavideo PTZ cameras. Once you install the app on the tablet, it is easy to control the cameras in the same network!

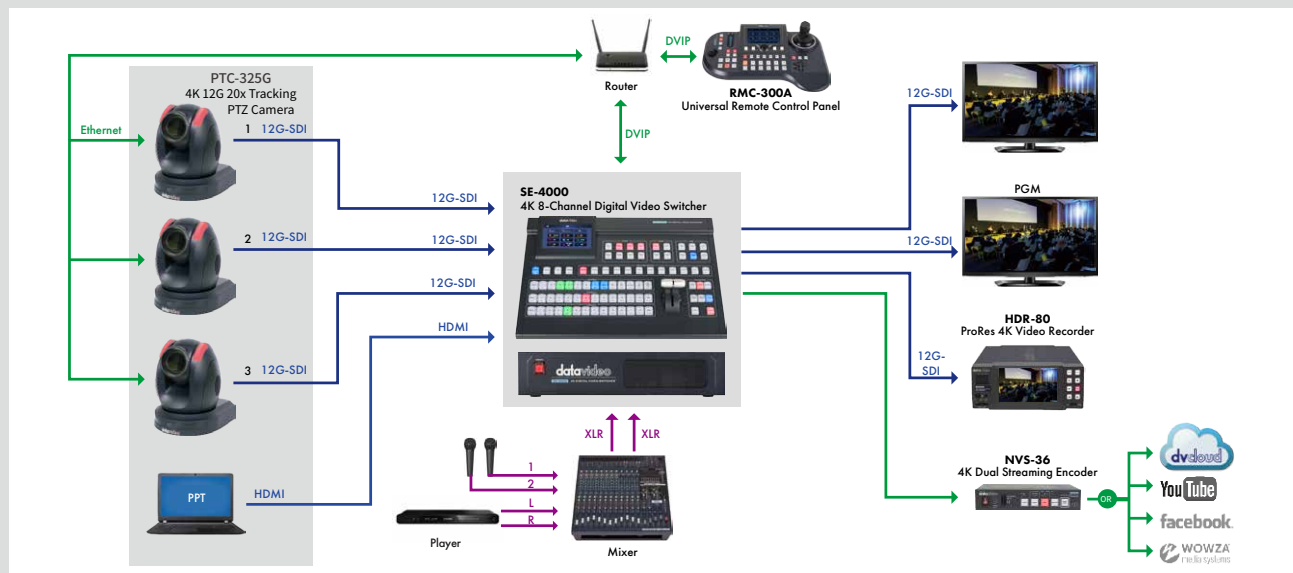
PTC-305



PTC-305T



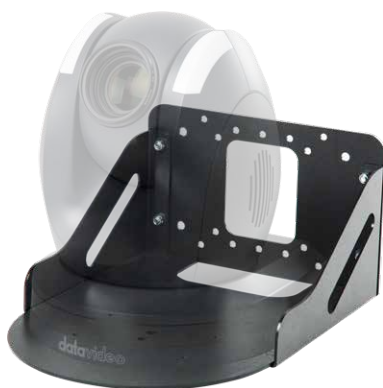
PTC-305G



Optional accessories



VP-929
HDMI 4K Repeater



WM-1
Wall Mount



WM-1W
Wall Mount (White)

The WM-1 can be positioned upside-down or rightside-up to suit various applications. The three-piece design is sturdy, and easy to install onto any wall.

What's in the box accessories



RMC-1AT
IR remote control



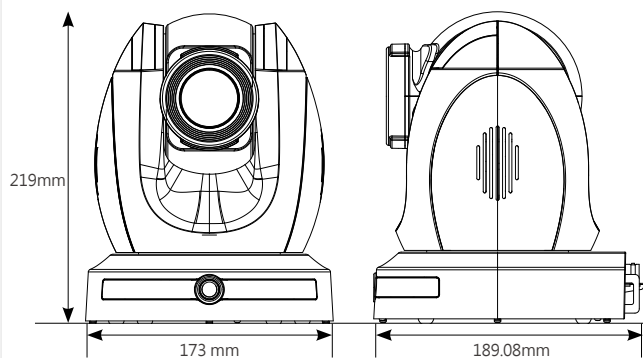
Ceiling mount bracket



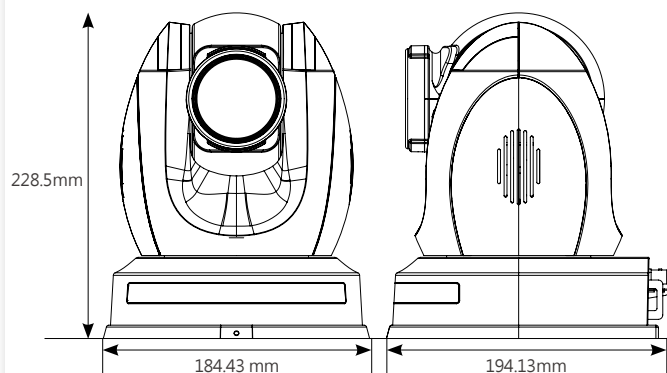
DC 12V Adaptor

Dimension

PTC-305 and PTC-305G



PTC-305T



Specification

NDIHX3

HDBaset

12G

	PTC-305	PTC-305T	PTC-305G
Product Name	4K 20x Tracking PTZ Camera	4K HDBaseT 20x Tracking PTZ Camera	4K 12G 20x Tracking PTZ Camera
Video format/Resolution	HDMI: 2160p60/59.94/50/30/29.97/25 1080p60/59.94/50/30/29.97/25 1080i60/59.94/50 720p60/59.94/50 *2160p60/59.94/50 YUV 4:2:2 SDI: 1080p 60/59.94/50/30/29.97/25 1080i 60/59.94/50 720p 60/59.94/50	HDMI/HDBaseT: 2160p60/59.94/50/30/29.97/25 1080p60/59.94/50/30/29.97/25 1080i60/59.94/50 720p60/59.94/50 *2160p60/59.94/50 YUV 4:2:2 SDI: 1080p 60/59.94/50/30/29.97/25 1080i 60/59.94/50 720p 60/59.94/50	HDMI: 2160p60/59.94/50/30/29.97/25 1080p60/59.94/50/30/29.97/25 1080i60/59.94/50 720p60/59.94/50 *2160p60/59.94/50 YUV 4:2:2 SDI: 2160p60/59.94/50/30/29.97/25 1080p 60/59.94/50/30/29.97/25 1080i 60/59.94/50 720p 60/59.94/50
Image Sensor	1/1.8" CMOS	1/1.8" CMOS	1/1.8" CMOS
Effective Pixels (approx.)	8.42Mega Pixels	8.42Mega Pixels	8.42Mega Pixels
S/N Ratio	≥55dB	≥55dB	≥55dB
Min. Illumination	0.5 Lux @ (F1.8, AGC ON)	0.5 Lux @ (F1.8, AGC ON)	0.5 Lux @ (F1.8, AGC ON)
Electronic Shutter	1/30s ~ 1/10000s	1/30s ~ 1/10000s	1/30s ~ 1/10000s
Zoom Ratio	20x Optical, 16x Digital Zoom	20x Optical, 16x Digital Zoom	20x Optical, 16x Digital Zoom
Effective Zoom Ratio	18.66x	18.66x	18.66x
Iris Control	Auto / Manual	Auto / Manual	Auto / Manual
Digital Noise Reductions	3D	3D	3D
On-Screen Display (OSD)	English/Simplified Chinese/Traditional Chinese	English/Simplified Chinese/Traditional Chinese	English/Simplified Chinese/Traditional Chinese
White Balance	Auto, Indoor, Outdoor, OnePush, Manual, VAR	Auto, Indoor, Outdoor, OnePush, Manual, VAR	Auto, Indoor, Outdoor, OnePush, Manual, VAR
AGC / Gain Control	Yes	Yes	Yes
Mirror / Flip Image	Yes	Yes	Yes
Focus Mode	Auto/Manual	Auto/Manual	Auto/Manual
Panning / Tilting Range	Pan: 300°, Tilt: +130° to -15°	Pan: 300°, Tilt: +130° to -15°	Pan: 300°, Tilt: +130° to -15°
Panning / Tilting Speed	Pan: 0.876°/s~43°/s Tilt: 0.693°/s~21.32°/s	Pan: 0.876°/s~43°/s Tilt: 0.693°/s~21.32°/s	Pan: 0.876°/s~43°/s Tilt: 0.693°/s~21.32°/s
Preset	255 Position	255 Position	255 Position
Focal Length	20x, f = 6.7mm ~125mm, F1.58 ~ F3.95	20x, f = 6.7mm ~125mm, F1.58 ~ F3.95	20x, f = 6.7mm ~125mm, F1.58 ~ F3.95
Field of View (Horizontal, Wide)	60°	60°	60°
Image Compensation	Back light compensation	Back light compensation	Back light compensation
Video Output	HDMI 2.0 x1 3G-SDI x1 10/100/1000M RJ45 (PoE) x1	HDMI 2.0 x1 3G-SDI x1 HDBaseT x1 10/100/1000M RJ45 (PoE) x1	HDMI 2.0 x1 3G-SDI x1 12G-SDI x1 10/100/1000M RJ45 (PoE) x1
Audio Input	3.5 mm x1 (mic in/line in) switch from Web UI	3.5 mm x1 (mic in/line in) switch from Web UI	3.5 mm x1 (mic in/line in) switch from Web UI
Tally LED	Yes	Yes	Yes
Control Protocol	Pelco-D, Pelco-P, VISCA, VISCA over IP, DVIP, ONVIF, NDI	Pelco-D, Pelco-P, VISCA, VISCA over IP, DVIP, ONVIF	Pelco-D, Pelco-P, VISCA, VISCA over IP, DVIP, ONVIF, NDI
Remote Control Interface	IR, Web GUI, RS-422/RS-232, DVIP, NDI	IR, Web GUI, RS-422/RS-232, DVIP HDBaseT(RJ-45)/Serial control on Receiver Box: Transmit up to 100m	IR, Web GUI, RS-422/RS-232, DVIP, NDI
Video Compression Format	H.264/H.265/MJPEG	H.264/H.265/MJPEG	H.264/H.265/MJPEG
Audio Compression Format	AAC, G711	AAC, G711	AAC, G711
Audio Bitrate	96Kbps, 128Kbps, 256Kbps	96Kbps, 128Kbps, 256Kbps	96Kbps, 128Kbps, 256Kbps
HD IP Interface	----	----	----
Streaming Protocols	RTSP, RTMP(S), ONVIF, Multicast, SRT, NDI Hx3 (1080p)	RTSP, RTMP(S), ONVIF, Multicast, SRT	RTSP, RTMP(S), ONVIF, Multicast, SRT, NDI Hx3 (1080p)
First Stream Supported Resolution	3840x2160, 1920x1080, 1280x720, 1024x576 960x540, 640x480, 640x360	3840x2160, 1920x1080, 1280x720, 1024x576 960x540, 640x480, 640x360	3840x2160, 1920x1080, 1280x720, 1024x576 960x540, 640x480, 640x360
Second Stream Supported Resolution	720x480, 640x360, 480x270, 320x240	720x480, 640x360, 480x270, 320x240	720x480, 640x360, 480x270, 320x240
Video Bitrate	32Kbps ~ 50Mbps (Single Stream)	32Kbps ~ 50Mbps (Single Stream)	32Kbps ~ 50Mbps (Single Stream)
Video Bitrate Mode	VBR, CBR	VBR, CBR	VBR, CBR
Encoding Frame rate	50Hz: 1-50fps 60Hz: 1-60fps	50Hz: 1-50fps 60Hz: 1-60fps	50Hz: 1-50fps 60Hz: 1-60fps
POE	IEEE 802.3at	IEEE 802.3at	IEEE 802.3at
F/W Update	Via Web UI or USB 2.0	Via Web UI or USB 2.0	Via Web UI or USB 2.0
IR Control	Yes	Yes	Yes
Camera Control Unit	RMC-2P RMC-180 series/ RMC-300 series/ PTZ View Assist APP	HS-1650T/HS-1600T Mark II/RMC-2P/RMC-180 series/RMC-300 series/PTZ View Assist APP	RMC-2P RMC-180 series/ RMC-300 series/ PTZ View Assist APP
Tripod Mount	1/4-20 UNC	1/4-20 UNC	1/4-20 UNC
Optional Accessories	WM-1/ WM-10/ WM-11	WM-1/ WM-10/ WM-11	WM-1/ WM-10/ WM-11
Color	Dark Blue/White	Dark Blue/White	Dark Blue/White
Dimension (LxWxH)	173 (W) x 219 (H) x 189.08 (D)	173 (W) x 219 (H) x 189.08 (D)	173 (W) x 219 (H) x 189.08 (D)
Weight	2.6 kg	2.6 kg	2.6 kg
Operating Temp. Range	0~40 °C	0~40 °C	0~40 °C
Power	DC 12V 21W	DC 12V 21W	DC 12V 21W



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