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4K Tracking PTZ Camera PTC-285/ PTC-285T/ PTC-285NDI

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4K Tracking PTZ Camera

Brand New 4K Auto tracking PTZ Camera

Live productions depend on high performance cameras and camera controllers. Datavideo is introducing the 4K50/60p Auto tracking PTZ camera, PTC-285 can be easily controlled via traditional RS-422 serial port, or IP remote control via DVIP (Datavideo proprietary protocol) or Sony VISCA over IP. This brand new 4K camera series supports dual streaming output for A/V market application. You can easily stream to Facebook (RTMPS), YouTube and dvCloud.

Datavideo also provides extended models such as PTC-285T 4K HDBaseT and PTC-285NDI to meet the needs of different workflows.

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PTC-285T

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PTC-285/ PTC-285T/ PTC-285NDI

- 2160p50/59.94/60 PTZ camera
- Support Auto tracking function
- 1/2.8" CMOS
- Excellent low light performance (0.5 Lux @ F1.8, AGC ON)
- 12x Optical Zoom, 16x Digital Zoom
- 4K Video outputs: HDMI 2.0, 3G-SDI, H.264/H.265 Streaming
- 2160p and 1080p (3G-SDI) Simultaneous video output
- 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
- User friendly web UI via browser & app (iOS and Android)
- Dual streaming: 2160p and 720p simultaneously
- NDI | HX3 technology (PTC-285NDI)

PTC-285 SERIES





PTC-285T















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-1 remote control and DVIP controllers (RMC-300A, RMC-180 MARK II and PTC View Assist). 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 Smart Classroom.



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.



Quick Access to Framing Options

All of the PTC-285 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.

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.



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.

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

Resolution is up to 2160p 50/60. 12x optical zoom for PTC-285 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.



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 1280x720p with 30fps 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.

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.







Simply enable Auto tracking with your IR remote control



RMC-1 PTZ Controller

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

Menu

Press the Menu button to open the camera's OSD menu which will show you all functions of the PTC-285.

Focus

Ergonomic design to ease manual focus adjustment.

Return

This returns the camera lens position to the Home position. When the OSD menu is opened, this button returns to the previous menu hierarchy level.

Auto tracking Enable / Auto Focus Press and hold this button to enable the PTC-285's smart tracking, taking you to experience the latest generation of the AI camera. Short

press to enable/disable auto focus.



Power

Press to activate the camera or enter standby mode.

Camera Selection / Setting Select to set or control up to four cameras.

Camera Presets

Each camera is allowed up to four presets which store the camera's current pan, tilt and zoom position, as well as settings such as iris, focus and movement speed. Presets allow quick access to settings required for specific camera shooting.

Zoom

Sets zoom speed and zooms in and out.

Micro Joystick

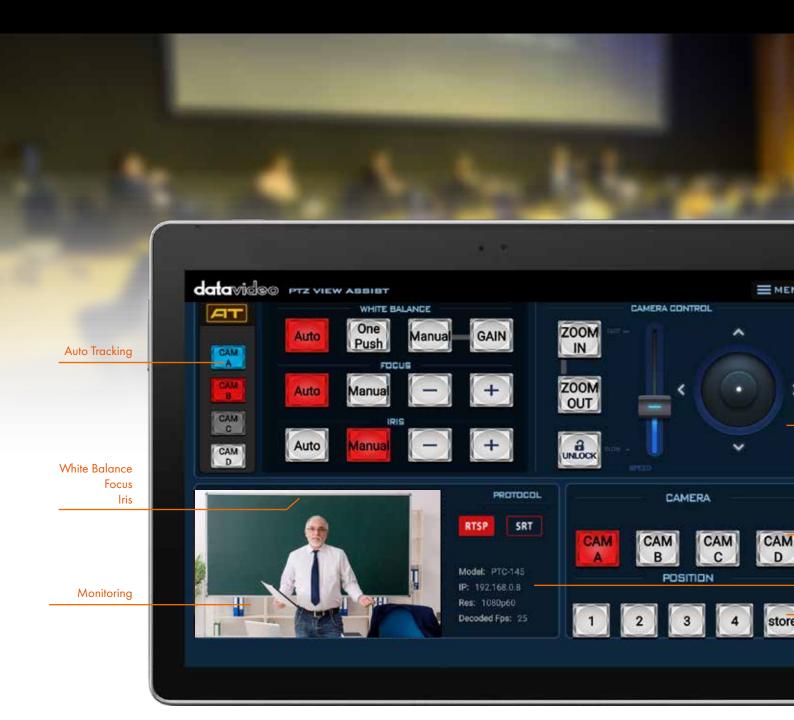
The joystick controls the pan and tilt directions or selects options or values while the OSD menu is opened.

IP Address Reset

Press and hold to restore the default IP address.

Store

Saves the current pan, tilt and zoom settings of the camera as well as settings such as iris, focus and movement speed to presets 1 to 4.



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-280, PTC-285, PTC-300 and PTC-305 series. 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! Mobile phone version available soon



Camera

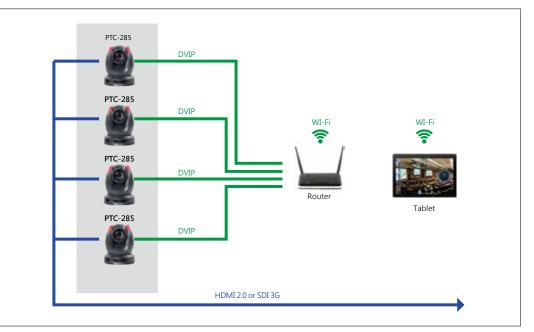
Camera Control

40

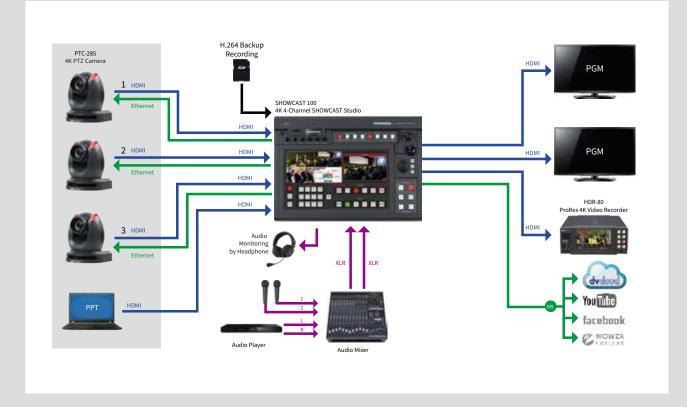
>

Protocal Position

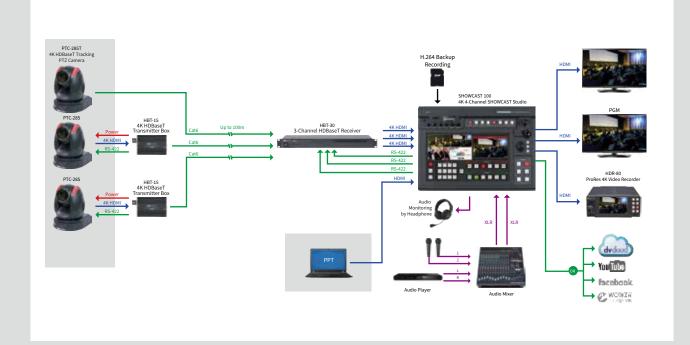
Camera control via web UI APP contrcol



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!



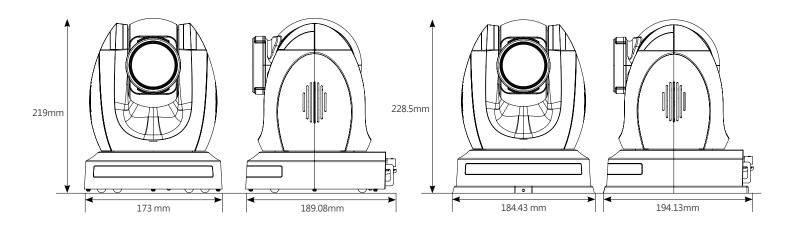
PTC-285T







Dimension



Specification



| NDI [®] | НХ3 |
|------------------|-----|
|------------------|-----|

| - | | | |
|---|--|--|---|
| | PTC-285 | PTC-285T | PTC-285NDI |
| Product Name | 4K Tracking PTZ Camera | 4K HDBaseT Tracking PTZ Camera | 4K NDI Tracking PTZ Camera |
| | - | | - |
| Video format/Resolution | 2160p60/59.94/50/30/29.97/25 1080p60/59.94/50/30/29.97/25 | 2160p60/59.94/50/30/29.97/25 1080p60/59.94/50/30/29.97/25 | 2160p60/59.94/50/30/29.97/25 1080p60/59.94/50/30/29.97/25 |
| | 720p60/59.94/50 | 720p60/59.94/50 | 720p60/59.94/50 |
| | *2160p60/59.94/50 YUV 4:2:2 | *2160p60/59.94/50 YUV 4:2:2 | *2160p60/59.94/50 YUV 4:2:2 |
| Image Sensor | 1/2.8" CMOS | 1/2.8" CMOS | 1/2.8" CMOS |
| Effective Pixels (approx.) | 8.51Mega Pixels | 8.51Mega Pixels | 8.51Mega 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 | 12x Optical Zoom, 16x Digital Zoom | 12x Optical Zoom, 16x Digital Zoom | 12x Optical Zoom, 16x Digital Zoom |
| Gamma Control | Off / Normal | Off / Normal | Off / Normal |
| 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° | Pan: 300° | Pan: 300° |
| | Tilt: +130° to -15° | Tilt: +130° to -15° | Tilt: +130° to -15° |
| Panning / Tilting Speed | Pan: 0.876° /s~43° /s | Pan: 0.876° /s~43° /s | Pan: 0.876° /s~43° /s |
| | Tilt: 0.693° /s ~21.32° /s | Tilt: 0.693° /s ~21.32° /s | Tilt: 0.693° /s ~21.32° /s |
| Preset | 255 Position | 255 Position | 255 Position |
| Focal Length | 12x, f = 4.4mm ~ 52.8mm, F1.8 ~ F2.6 | 12x, f = 4.4mm ~ 52.8mm, F1.8 ~ F2.6 | 12x, f = 4.4mm ~ 52.8mm, F1.8 ~ F2.6 |
| Field of View (Horizontal, | 80° | 80° | 80° |
| Wide) | | | |
| Image Compensation | Back light compensation | Back light compensation | Back light compensation |
| Video Output | HDMI 2.0 x1 | HDMI 2.0 x1 | HDMI 2.0 x1 |
| | 3G-SDI x1 | 3G-SDI x1 | 3G-SDI x1 |
| | 10/100/1000M RJ45 (PoE) x1 | HDBaseT x 1 10/100/1000M RJ45 (PoE) x1 | 10/100/1000M RJ45 (PoE) x1 |
| Audio Input | 3.5 mm x1 (mic in/line in) | 3.5 mm x1 (mic in/line in) | 3.5 mm x1 (mic in/line in) |
| Addio Input | switch from Web UI | switch from Web UI | switch from Web UI |
| Tally LED | Yes | Yes | Yes |
| Lens Filter | N/A | N/A | N/A |
| Control Protocol | Pelco-D, Pelco-P, | Pelco-D, Pelco-P, | Pelco-D, Pelco-P, |
| | VISCA, VISCA over IP, | VISCA, VISCA over IP, | VISCA, VISCA over IP, |
| | DVIP | DVIP | DVIP |
| | | | NDI |
| Remote Control Interface | IR Web UI | IR Web UI | IR Web UI |
| | RS-422 | RS-422 | RS-422 |
| | DVIP | DVIP | DVIP |
| | | | NDI |
| Video Compression Format | H.264/H.265/MJPEG | H.264/H.265/MJPEG | H.264/H.265/MJPEG |
| Audio Compression Format | AAC | AAC | AAC |
| Audio Bitrate | 96Kbps, 128Kbps | 96Kbps, 128Kbps | 96Kbps, 128Kbps |
| HD IP Interface | | | |
| Streaming Protocols | TCP/IP, HTTP, RTSP, RTMP(S), ONVIF, DHCP, | TCP/IP, HTTP, RTSP, RTMP(S), ONVIF, DHCP, | TCP/IP, HTTP, RTSP, RTMP(S), ONVIF, DHCP, |
| | Multicast | Multicast | Multicast |
| First Stream Supported | 3840x2160 | 3840x2160 | 3840x2160 |
| Resolution | 1920x1080 | 1920x1080 | 1920x1080 |
| | 1280x720 1024x576 | 1280x720 1024x576 | 1280x720 1024x576 |
| | 960x540 | 960x540 | 960x540 |
| | 640x480 | 640x480 | 640x480 |
| | 640x360 | 640x360 | 640x360 |
| Second Stream Supported | 720x480 | 720x480 | 720x480 |
| Resolution | 640x360 | 640x360 | 640x360 480x270 |
| | 480x270 320x240 | 480x270 320x240 | 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. |
| | | Via Web UI or USB 2.0 | Via Web UI or USB 2.0 |
| F/W/Undate | Via Web UI or USB 2.0 | | |
| F/W Update | Via Web UI or USB 2.0 Ves | Voc | Voc |
| IR Control | Yes | Yes | Yes PMC 180 series/PMC 200 series/PTZ View Assist |
| | Yes RMC-180 series/RMC-300 series/PTZ View Assist | HS-1600T series/RMC-180 series/RMC-300 series/ | RMC-180 series/RMC-300 series/PTZ View Assist |
| IR Control Camera Control Unit | Yes RMC-180 series/RMC-300 series/PTZ View Assist APP | HS-1600T series/RMC-180 series/RMC-300 series/ PTZ View Assist APP | RMC-180 series/RMC-300 series/PTZ View Assist APP |
| IR Control Camera Control Unit Tripod Mount | Yes RMC-180 series/RMC-300 series/PTZ View Assist APP 1/4-20 UNC | HS-1600T series/RMC-180 series/RMC-300 series/ PTZ View Assist APP 1/4-20 UNC | RMC-180 series/RMC-300 series/PTZ View Assist APP 1/4-20 UNC |
| IR Control Camera Control Unit Tripod Mount Optional Accessories | Yes RMC-180 series/RMC-300 series/PTZ View Assist APP 1/4-20 UNC WM-1/ WM-10/ WM-11 | HS-1600T series/RMC-180 series/RMC-300 series/ PTZ View Assist APP 1/4-20 UNC WM-1/ WM-10/ WM-11 | RMC-180 series/RMC-300 series/PTZ View Assist APP 1/4-20 UNC WM-1/ WM-10/ WM-11 |
| IR Control Camera Control Unit Tripod Mount Optional Accessories Color | Yes RMC-180 series/RMC-300 series/PTZ View Assist APP 1/4-20 UNC WM-1/ WM-10/ WM-11 Dark Blue/White | HS-1600T series/RMC-180 series/RMC-300 series/ PTZ View Assist APP 1/4-20 UNC WM-1/ WM-10/ WM-11 Dark Blue/White | RMC-180 series/RMC-300 series/PTZ View Assist APP 1/4-20 UNC WM-1/ WM-10/ WM-11 Dark Blue/White |
| IR Control Camera Control Unit Tripod Mount Optional Accessories Color Dimension (LxWxH) | Yes RMC-180 series/RMC-300 series/PTZ View Assist APP 1/4-20 UNC WM-1/ WM-10/ WM-11 Dark Blue/White 173 (W) x 219 (H) x 189.08 (D) | HS-1600T series/RMC-180 series/RMC-300 series/ PTZ View Assist APP 1/4-20 UNC WM-1/ WM-10/ WM-11 Dark Blue/White 173 (W) x 219 (H) x 189.08 (D) | RMC-180 series/RMC-300 series/PTZ View Assist APP 1/4-20 UNC WM-1/ WM-10/ WM-11 Dark Blue/White 173 (W) x 219 (H) x 189.08 (D) |
| IR Control Camera Control Unit Tripod Mount Optional Accessories Color Dimension (LxWxH) Weight | Yes RMC-180 series/RMC-300 series/PTZ View Assist APP 1/4-20 UNC WM-1/ WM-10/ WM-11 Dark Blue/White 173 (W) x 219 (H) x 189.08 (D) 2.6 kg | HS-1600T series/RMC-180 series/RMC-300 series/ PTZ View Assist APP 1/4-20 UNC WM-1/ WM-10/ WM-11 Dark Blue/White 173 (W) x 219 (H) x 189.08 (D) 2.6 kg | RMC-180 series/RMC-300 series/PTZ View Assist APP 1/4-20 UNC WM-1/ WM-10/ WM-11 Dark Blue/White 173 (W) x 219 (H) x 189.08 (D) 2.6 kg |
| IR Control Camera Control Unit Tripod Mount Optional Accessories Color Dimension (LxWxH) | Yes RMC-180 series/RMC-300 series/PTZ View Assist APP 1/4-20 UNC WM-1/ WM-10/ WM-11 Dark Blue/White 173 (W) x 219 (H) x 189.08 (D) | HS-1600T series/RMC-180 series/RMC-300 series/ PTZ View Assist APP 1/4-20 UNC WM-1/ WM-10/ WM-11 Dark Blue/White 173 (W) x 219 (H) x 189.08 (D) | RMC-180 series/RMC-300 series/PTZ View Assist APP 1/4-20 UNC WM-1/ WM-10/ WM-11 Dark Blue/White 173 (W) x 219 (H) x 189.08 (D) |



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