

Explore 300

4/3" Inch Sensor PTZ Camera for Broadcasters



Broadcast Level PTZ Camera Disrupts AV Industry

Telycam's **Explore 300** 4K PTZ camera is purpose-built for modern ProAV and hybrid production environments where flexibility, efficiency, and ease of deployment are essential. The AV-focused counterpart to Telycam's broadcast-class Explore 500, the Explore 300 delivers its core capabilities in a streamlined platform optimized for scalable, IP-based deployments.

Featuring a high-performance 4/3" Sony sensor, fast hybrid auto-focus, optical low-pass filter (OLPF) for artifact-free image capture even against LED backgrounds; and a precision brushless motor system, These powerful features combine to enable consistently sharp, detailed images with smooth, repeatable motion.

For operator efficiency, the Explore 300 features a touch-friendly web UI optimized for tablets and smartphones, enabling intuitive real-time control of PTZ movement, focus, and tracking directly from the live video feed.

Designed for modern IP-based AV infrastructures, the Explore 300 supports NDI® HX3, HDMI, 3G-SDI, USB, SRT, RTSP, RTMP, and FreeD, enabling seamless integration across a wide range of professional production workflows.

20x 4K60 Auto-tracking Free-D HDMI/3G-SDI/ NDI®HX3 /XLR

Features & Benefits:

High-Performance Sensor and Image Processor:

The Explore 300 utilizes a professional-grade 4/3" Sony sensor combined with advanced image processing technology to deliver detailed 4K ultra-high-definition image with accurate color reproduction, excellent low-light performance, and natural depth.

Fast Hybrid Auto-Focus

The Explore 300 combines Phase Detection Auto Focus (PDAF) and Contrast Detection Auto Focus (CDAF) technologies to deliver fast, accurate, and stable focusing performance. PDAF enables rapid subject acquisition and responsive tracking, while CDAF provides precise focus refinement for enhanced image sharpness. Together, these technologies ensure reliable focus performance even in dynamic production environments and challenging lighting conditions.

Optical Low-Pass Filter (OLPF)

Integrated OLPF technology minimizes moiré and aliasing artifacts when shooting against LED walls, display panels, and fine-pattern backgrounds, making the Explore 300 ideal for modern AV and virtual production environments.

DC Brushless PTZ Motor System with Preset Sync

Features a precision DC brushless PTZ motor system with synchronized Pan, Tilt, and Zoom control during preset recall, ensuring smooth movement between preset positions.

With stable torque across the full speed range, the system delivers especially smooth and precise low-speed operation, reducing jitter and abrupt transitions while eliminating robotic motion commonly found in conventional PTZ cameras for natural broadcast-grade performance.

Versatile Output Options:

The Explore XE offers diverse output options, including 4K60p resolution through NDI|HX, and HDMI, connections. Users can choose the output method that best suits their production needs, ensuring flexibility and compatibility.

Robust Audio Capabilities:

The Explore XE features with a 3.5mm line-in input and a Mini XLR audio input. Moreover, the XLR input supports phantom power, providing compatibility with a wide range of microphones and audio equipment.

Touch-Friendly Web UI

The newly designed, touch-friendly web UI offers intuitive on-screen PTZ control and is fully optimized for tablets and smartphones. Operators can reposition the camera, adjust focus or instantly switch tracking subjects directly from the live feed with a single tap, ensuring fast, precise, and flexible control across both studio and field environments.

Native AI-Based Auto-Tracking & Auto-framing:

The Explore incorporates native AI-based auto-tracking and auto-framing technology, this intelligent feature automatically follows subjects, enhancing ease of use and ensuring that important moments are captured flawlessly.

Free D Technology Integration:

The Explore XE seamlessly integrates Free D technology, empowering users to Explore XE dynamic shooting angles and perspectives, making it ideal for versatile real-world and virtual-world applications.

MicroSD Card Slots

MicroSD card slots—one for firmware upgrades and the other for local recording. Record directly onto the camera for instant backup during network issues or quick access, ideal for prompt event review.

Specification

Camera	Explore 300
Part NO.	TLC-900-IP-20-4K(NDI)-AB-XE-G2
Sensor	Sony 4/3" inch 9MP UHD CMOS sensor
Zoom	20X optical zoom
Lens	f = 9.79 ~ 186.5mm, F2.8 ~ F4.5
Horizontal View Angle	71° (Wide) ~ 4.05° (Tele)
Vertical viewing angle	39.6° ~ 2.2°
Diagonal viewing angle	78.5° ~ 4.6°
Minimum Working Distance	Wide: 15cm; Tele: 150cm
S/N Ratio	≥50dB
Video Format	3G-SDI: 1920*1080P60/59.94/50/30/29.97/25/24/23.98; 1920*1080I60/59.94/50; 1280*720P60/59.94/50/30/29.97/25
	HDMI2.0: 3840*2160P60/50/30/25/59.94/29.97/24/23.98; 1920*1080P60/50/30/25/59.94/29.97/24/23.98; 1920*1080I60/50/59.94; 1280*720P60/50/30/25/59.94/29.97
	NDI®HX3: Main Stream: 3840*2160P15~60; 1920*1080P15~60; 1280*720P15~60; 1024*576P15~60 Sub Stream :640*360P15~30
	USB Type-C: NV12: 1920*1080P5; 1280*720P15; 1024*576P25; 800*448P30 YUYV: 1920*1080P5; 1280*720P15; 1024*576P25; 800*448P30 MJPG: 3840*2160P30; 1920*1080P60; 1280*720P60; 1024*576P60; 800*448P60 H264/H265: 3840*2160P30; 1920*1080P60; 1280*720P60; 1024*576P60; 800*448P60
Image Parameters	
Noise Reduction	2D&3D
Minimum lux	0.5Lux (50 IRE Max AGC, 1/30, F2.8)
White Balance	Auto/Manual/Auto tracking/Push/Indoor/Outdoor/Color Temperature
Exposure	Auto/Manual/Shutter Priority/Iris Priority/Brightness Priority
Anti-Flicker	OFF, 50Hz, 60Hz
Image Flip	Support
Mirroring	Support

Focus	Auto/Manual
Iris	Auto/Manual
Electronic-shutter	Auto/Manual
Gamma	Support
Backlight Compensation	Support
IP Streaming	
Video Encoding	H.264/H.265 (Sub stream supports MJPEG)
Bitrate Control	Variable bitrate(VBR), Constant bitrate(CBR)
Bitrate Range	1024Kbps~122800Kbps
Network Port Speed	1000M
Protocol	NDI@HX3, SRT, HTTP, HTTPS, RTSP, RTMP, RTMPS, ONVIF, VISCA over IP(TCP&UDP), VISCA, PELCO P/D, SSDP, FreeD, NTP, RTP Multicast, WebRTC, MPEG-TS
Pan/Tilt Movement	
Preset	Remote controller: 10; Serial port: 256; Accuracy: 0.1°
Pan Rotation Angle	-170° ~+170 °
Tilt Rotation Angle	-90° ~+90°
Pan Rotation Speed	0.1°~80°/s
Tilt Rotation Speed	0.1°~60°/s
I/O Interface	
Control Port	RS232(RS485), RS422, NDI@HX3
Video Port	NDI@HX,HDMI2.0,3G-SDI,USB Type-C
Audio Port	Min XLR(with phantom power), stereo 3.5mm line in
Tally	Support
POE++	Support
Daisy Chain	Support
General	
Input Voltage	DC12V, POE++ (IEEE802.3bt)
Operating Temperature	-10℃ ~ 50℃
Operating Humidity	≤80%
Dimension (L×W×H)	232.5mm×264mm×269mm
Net Weight	4.6KG(10.15LBS)
Color	Black/White

Interface



Dimension

