

Explore 100



Advanced 4K60p PTZ camera for immersive broadcast VR video production.

Broadcast Level PTZ Camera Disrupts AV Industry

Telycam's Explore 100 is an advanced 4K60p PTZ camera designed for immersive broadcast, live production, and virtual production environments, combining high-quality imaging with flexible IP-based workflows.

It features a Sony 1/1.8-inch 9MP CMOS sensor and advanced image processing, delivering sharp, accurate, and true-to-life 4K video with reliable autofocus performance. A precision DC brushless PTZ motor system with three-axis synchronized Pan/Tilt/Zoom control during preset recall ensures smooth and coordinated movement between preset positions, delivering stable and natural camera transitions. The system also provides especially fluid low-speed operation while eliminating robotic motion commonly found in conventional PTZ cameras.

The Explore 100 supports 4K60p output via NDI® HX3, 12G-SDI, HDMI, and SFP+, with Genlock capability for precise synchronization in multi-camera production systems.

Built-in AI auto-tracking and FreeD support enable flexible operation across both real-world and virtual production workflows, while a touch-friendly web UI provides intuitive control of PTZ, focus, and tracking from the live video feed.

4K60 Auto-tracking FreeD Genlock NDI®, NDI®HX3, HDMI2.0, SFP+, 3G-SDI, 12G-SDI, XLR

Features & Benefits:

High-Performance Sensor and Image Processor

The Explore SE boasts a Sony 1/1.8-inch 9MP CMOS sensor and a state-of-the-art image processor, to deliver stunning ultra-high-definition images that capture realistic colors and maintain rapid focus.

This feature ensures that your audience experiences content with the highest level of realism.

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

This Explore SE offers diverse output options, including 4K60p resolution through NDI®HX3, 12G-SDI, HDMI, and SFP+ connections. Users can choose the output method that best suits their production needs, ensuring flexibility and compatibility.

Genlock Functionality

The Explore SE features Genlock, a valuable synchronization feature, which makes it to function as a primary camera, ensuring precise video synchronization with other sub-cameras in complex broadcast video production and live streaming setups.

Robust Audio Capabilities

The Explore SE 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.

Native AI-Based Auto-Tracking

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

FreeD Technology Integration

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

MicroSD Card Slots

Featuring two specialized MicroSD card slots, one exclusively for firmware updates and the other designed for local recording. This feature allows for direct recording onto the camera, providing an instant backup solution during network disruptions and enabling quick access to footage, simplifying event review without relying on

remote server access.

Specification

Camera	Explore 100
Part NO.	TLC-900-IP-30-4K(NDI)-AB-G2
Sensor	1/1.8-inch, 9MP UHD CMOS sensor
Zoom	30x optical zoom
Lens	f = 6.91 ~ 214.64mm, F1.35 ~ F4.6
Horizontal View Angle	63° (Wide) ~ 2° (Tele)
Vertical viewing angle	34.14° ~ 1.12°
Diagonal viewing angle	67.08° ~ 2.27°
Minimum Working Distance	Wide: 1.5m; Tele: 1.5m
S/N Ratio	≥50dB
Video Format	12G-SDI: 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
	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®/ NDI®HX3: Main Stream: 3840*2160P15~60; 1920*1080P15~60; 1280*720P15~60; 1024*576P15~60 Sub Stream :640*360P15~30
	SFP+: 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
	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, F1.35)
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)
Video Bitrate	NDI HX3: 3Mbps ~ 120Mbps; NDI® high bandwidth: 90Mbps ~ 250Mbps
Network Port Speed	1000M
Protocol	NDI®, 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, RJ45, USB, NDI®HX3, NDI®
Video Port	NDI®, NDI®HX3, HDMI2.0, SFP+, 3G-SDI, 12G-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

Input/Output Interface



Dimensional Drawing (mm)

