

# PTZ-12G+

Solution Brief



## Introducing PTZ-12G+

### **4K/60 PTZ Cameras with 30x Optical Zoom**

Perfect for live broadcasts in Houses of Worship, corporate board rooms, auditoriums, classrooms and TV studios, the ROSS PTZ-12G+ delivers all the high-end features of a UHD pan-tilt-zoom (PTZ) camera within your production budget. The result is a high performance PTZ camera that is easier to deploy, integrate and operate than typical offerings in its class.

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## Flawless Ross Ecosystem Integration

Enhance productivity and ease of operation by integrating the PTZ with the ROSS ecosystem. Unlimited presets available in DashBoard or with the more advanced SmartShell control system. Natively integrated with ROSS' Vision[Ai]ry face and body detection system, it offers unparalleled versatility and ease of use.



## Simple Installation

For installation simplicity and flexibility, the PTZ-12G+ supports IP control, streaming and Power-over-Ethernet over a single Cat5E cable. The unit has image invert functions for upside down and mirror shots as well as wall and pole mount options enabling the acquisition of the perfect shot.



## Superior Quality

Featuring a 9.17 megapixel, 1/1.8" inch CMOS sensor, the PTZ captures full 4K UHD and 1080p HD video up to 60fps to offer exceptional broadcast picture quality. The PTZ's 30x optical and 12x digital zoom ensure you create magnificent shots, even in very large rooms or auditoriums.

Features	Benefits
Broadcast Quality Outputs	Uncompressed, baseband SDI and HDMI video for traditional broadcast connections and workflows.
Genlock Input	Baseband SDI outputs are synchronized for live production using VBS or TLS signals thus avoiding the use of frame stores and external processing gear.
Long Optical Zoom	The 30X telephoto zoom lens allows tight shots of objects far from the unit.
IP Control & Power	Easy installation is achieved with a single CAT5e cable that transports control via Visca protocol, and POE++ power over long distances.
NDI Implementation	Several updated NDI functions are provided. Control, network grouping NDI v5 sync, NDI HX2, NDI HX3 w/ 4K UHD. High Bandwidth NDI is simultaneous output with NDI HX2, NDI HX3.
USB Control	When connected to a high-speed USB3.0 port, the PTZ is registered as a USB native device which allows control via PC or MAC.
Low Latency Streaming Outputs	Output up to three simultaneous H264/H265 streams over RTMP, RTSP, RTMPS, MPEG-TS or SRT is possible with NDI turned off.
ON AIR Tally	Provides ON-AIR indication, is front facing and is integrated into the Ross robotics control system ecosystem.
Fast Pan Tilt	Very fast Pan and Tilt speeds permit quick cuts and presets to be recalled.
Ross Control Systems	Native ROSS Dashboard control (PTZ license included) includes basic video shading, SmartShell for advanced control and Joystick operation. Optionally the Monogram Creative Panel or generic USB Joystick provide effortless operation.
Advanced Auto Tracking	Vision[Ai]ry facial and body tracking software is fully compatible and offered as an option presented in the Dashboard environment.

# PTZ-12G+

## Specifications

Item	Specifications
Image Sensors	1/1.8 inch, 9.17Mpixel, RS CMOS
Video Output Interface	HDMI / 3G-SDI / 12G-SDI / RJ 45 Ethernet / USB
IP Stream	NDI : HEVC(H.265) 4K59.94fps, H.264 640x360 29.97fps or RTSP : HEVC(H.265) 4K 59.94fps, H.264 1080p 59.94fps, H.264 640x360 29.97fps
Video Output	Ethernet / 12G-SDI / 3G-SDI / HDMI2.0 / USB 3.0
System Resolution	3840x2160p (UHD), 1920x1080p (HD), 1920x1080i (HD), 1280x720p, 640x360p
Optical Zoom	30x
Digital Zoom	12x
Horizontal Viewing Angle	63° (Wide) to 3.7° (Tele)
Vertical Viewing Angle	35.4° (Wide) to 2.1° (Tele)
Panning Speed	0.01~300°/sec
Panning Angle	+170° ~ -170°
Tilting Angle	+90° ~ -30°
Tilting Speed	0.01 ~ 300°/sec
Lense Focal Length	6.5mm~202mm
Lense Aperture	F1.6 @ 6.5mm ~ F4.8 @ 202mm
Shutter Speed	1/1 ~ 1/10,000 sec
Minimum Object Distance	1.5m (Wide/Tele)
Minimum Illumination	0.05 lux (F1.6, 50IRE, 30fps)
Video S/N Ratio	> 50dB
Focus System	Auto, Manual, Smart AF
Gain Control	Auto / Manual
White Balance	Auto / Manual
Exposure Control	Auto / Manual / Smart AE
Digital WDR	Yes

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3D NR	Yes
Image Flip	Yes
Preset position memories	256 (on-board) - Unlimited with DashBoard or SmartShell control system
Audio Compression Format	IP : G.711 USB : PCM
Control Protocols	VISCA / VISCA IP / PELCO-D / NDI / UVC/ UAC
Serial Control	RS-232 or RS-422
Tally Indicator	Yes: Front
PoE	High Power PoE++ (IEEE802.3bt)
Network Streaming Protocols	Full NDI / NDI HX3 / NDI HX2 / RTSP / RTMP / RTMPS / MPEG-TS / SRT
Video Compression Types	HEVC/ H.265: 2160 60p      H.264: 2160 30p      MJPEG: 1080 30p
Audio Input	Line In/MIC In, 2-channel Phone Jack 3.5mm x1
IR Pass-through	Yes
IR Receiver	Yes
IR Remote Control	Yes
IQ Sync	Yes
Color Space	Standard / Rec 709
Genlock	VBS, TLS
AR/VR Data Out	FreeD, IP or Serial data
Storage Temperature	-20°C to +60°C (-4°F to 140°F)
Seperating Temperature	0°C to 40°C (32°F to 104°F)
Power Consuption	DC: ≤31W , PoE++: ≤33W
Weight	6.6 lbs (3 kg)
Dimensions	9.1" x 7.4" x 7.4"      (232 x 188 x 189mm)