

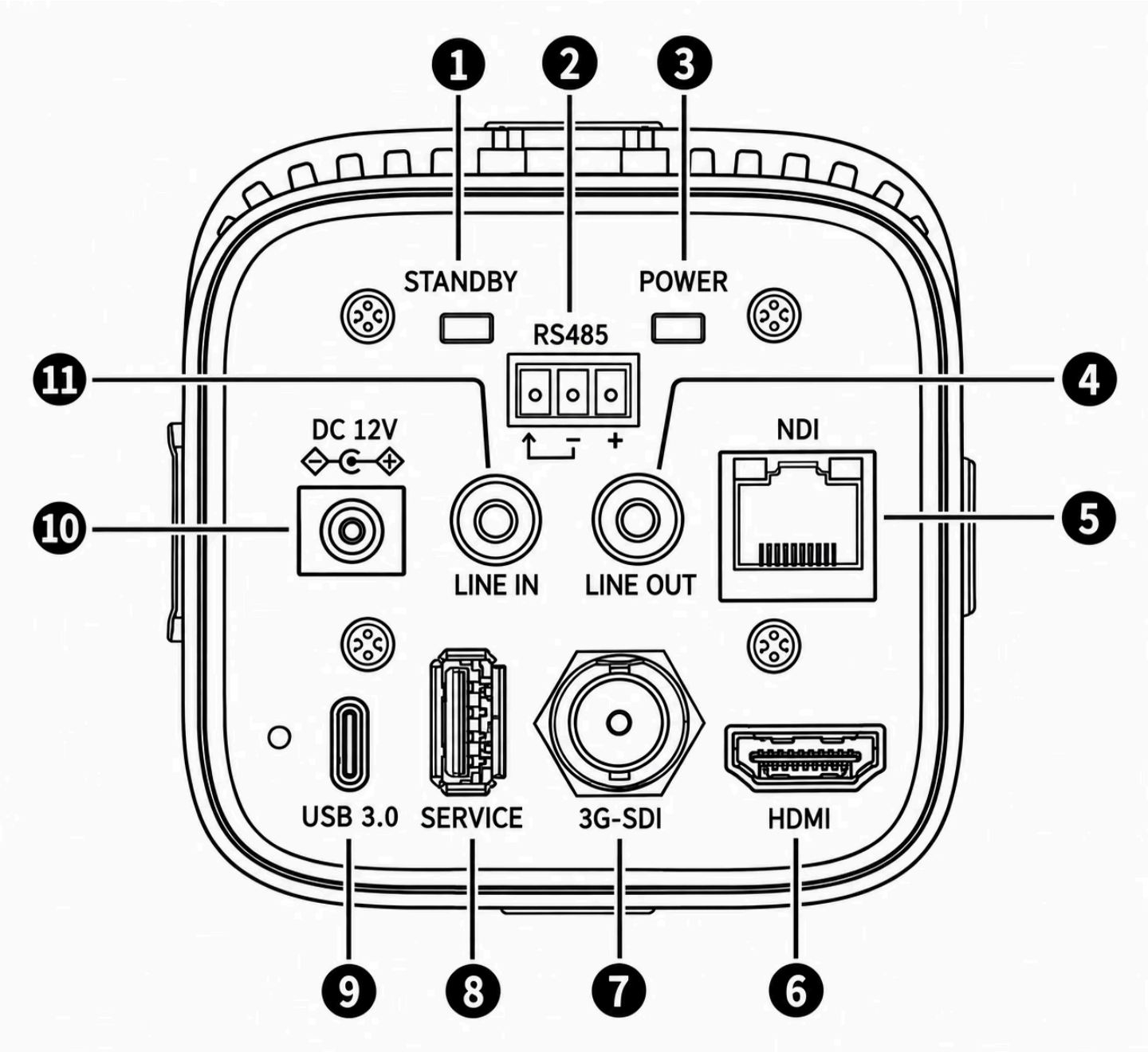
PTZOptics Studio 4K

Technical Specifications

Technical Specs

Model Information

Feature	Value
Official SKU	`PT12X-STUDIO-4K-GY-G3`, `PT12X-STUDIO-4K-WH-G3`, `PT20X-STUDIO-4K-GY-G3`, `PT20X-STUDIO-4K-WH-G3`
Model Name	`Studio 4K`



Studio 4K Connection List

1. Standby LED
2. RS-485 Interface
3. Power LED
4. Line Output
5. LAN NDI
6. HDMI
7. 3G-SDI
8. USB Service Port

9. USB 3.0
10. DC 12V Power
11. Line Input

Camera & Lens

Feature	Specification
Resolution & Frame Rate HDMI, NDI, & USB	**3840x2160p** - 60/59.94/50/30/29.97/25 **1920x1080p** - 60/59.94/50/30/29.97/25 **1920x1080i** - 60/59.94/50 **1280x720p** - 60/59.94
Resolution & Frame Rate SDI	**1920x1080p** - 60/59.94/50/30/29.97/25 **1920x1080i** - 60/59.94/50 **1280x720p** - 60/59.94/50
Lens	**(12X)** Sony 1/2.8" CMOS
	(20X) Sony 1/2.8" CMOS
Image Sensor	**(12X)** 8.46MP, Effective Pixels: 8.29
	(20X) 8.46MP, Effective Pixels: 8.29
Optical Lens Focal Length (Zoom)	**(12X)** f = 4.1mm ~ 49.2mm, F1.8 ~ F2.68
	(20X) f = 4.7mm ~ 94mm, F1.6 ~ F3.6
Optical Lens Field of View Horizontal & Vertical	**(12X) Horizontal**..... 6.9° ~ 72.5°, **(12X) Vertical**..... 3.9° ~ 44.8°
	(20X)Horizontal..... 3.5° ~ 60.7°, **(20X) Vertical**..... 1.9° ~ 34.1°
Display Field of View	**(12X)** 80.2°
	(20X) 67.8°
Min Lux	0.5 Lux @ (F1.8, AGC ON)

Feature	Specification
Shutter	1/30s ~ 1/10000s
Presets	255 Presets
Preset Accuracy	0.1º
Image Flip, Mirror, and Freeze	Supported
Scanning Mode	Progressive and Interlaced

Video Output Reference

Feature	HDMI	3G-SDI
Maximum Resolution	**4K @ 60fps** (3840 × 2160)	**1080p @ 60fps** (1920 × 1080)
Connector	HDMI 2.0	BNC (locking)
Signal Type	Uncompressed Digital	3G-SDI (Level-A or Level-B)
Embedded Audio	✅ Yes	✅ Yes
Typical Cable Length	~49 ft (15 m) without extenders	~200–328 ft (60–100 m)

Physical Specifications

Feature	Specification
Material	Aluminum, Plastic
Color	Gray or White
Dimensions(L x W x H)	**(12X & 20X)** 5.7” L x 2.99” W x 3.09” H, 145 mm L x 76 mm W x 78.5mm H
Weight	**(12X)** 1.5 lbs 0.68kg

Feature	Specification
	(20X) 1.4 lbs 0.64kg
Working Environment	Indoor
Humidity Range	10% - 80%
Operating Temperature	14°F ~ 104°F (-10°C ~ 40°C)
Storage Temperature	-40°F ~ 140°F (-40°C ~ 60°C)

Connections

Feature	Specification
RJ45	10/100/1000M Adaptive Ethernet Port, NDI HX3 enabled
HDMI	Version 2.0
3G-SDI	BNC Type, 800mVP-p, 75Ω, Along to SMPTE 424M,standard
USB 3.0	Type C
UVC Version Supported:	UVC 1.0
Compression Standards	YUY2: Max resolution: 1920x1080p@30
	MJPEG: Max resolution: 3840x2160p@30
	H.264 AVC & SVC: Max resolution: 3840x2160p@30
	H.265: Max resolution: 3840x2160p@30 (RTSP/NDI HX3 only)
Audio Interface	3.5mm Line level Input & Output

Feature	Specification
RS485 Input Output	2-pin Phoenix port RS485 Input / Output, Max distance: 3,937ft / 1200m, **Protocol**: VISCA / Pelco-D / Pelco-P
IR	4x IR Addresses, Max distance 30ft / 9m
Power Supply	JEITA type (DC IN 12V) / PoE (802.3at)
Current Consumption	Max 2.0A

IP Video Specifications

Feature	Specification
Video Compression	H.264 / H.265 / MJPEG / YUY2 (H265 HEVC via RTSP/NDI HX3 only)
Video Stream	First Stream, Second Stream
First Stream Resolutions	3840x2160, 2560x1440, 1920x1080, 1280x720, 1024x576, 960x540, 640x360
Second Stream Resolutions	1920x1080, 1280x720, 1024x576, 960x540, 640x360
Video Bitrate	**First Stream:** 32kbps ~ 81920kbps, **Second Stream:** 32kbps ~ 20480kbps
Bitrate Type	Constant Bit Rate (CBR), Variable Bit Rate (VBR)
Frame Rate	50Hz: 1 ~ 50 fps. 60Hz: 1 ~ 60 fps
Audio Compression	AAC
Audio Bit Rate	96kbps, 128kbps
Supported Protocols	TCP/IP, UDP, HTTP, RTSP, RTMP/RTMPS, ONVIF, SRT,Multicast, etc.

Packing List

- Studio 4K Camera
- AC Power Supply
- USB C-A Cable
- Quick Start Guide
- IR Remote
- 2 AAA Batteries
- Lens Cap

Compliance

The Studio 4K is an NDAA Compliant camera.

Covered by one or more claims of the HEVC patents listed at patentlist.accessadvance.com

