

# 4K NDI POVZoom Camera

Optical Zoom, Auto Focus, Ultra compact, POE, multiple streaming and NDI@HX3

**Z**owieCAM 4K POVZoom camera crafted in an ultra compact, durable aluminum body. It is the smallest 4K Ultra HD POV optical zoom camera in the world with streaming capability plus featuring NDI@|HX3, PoE and distinct tally light. It is rugged, small form-factor, light weight and professional for critical streaming applications. It is cost effective, easy to use, user friendly with top and bottom standard tripod mounts. ZowieCAM supports popular USB Type-C charger, PoE 802.3af, WIFI and a range of innovative modern features. It is a standalone streaming IP camera with HDMI and SDI output, no PC required.

The POVZoom has two standard 1/4" tripod mounts and gyroscope detection. The design makes it flexible to mount anywhere but always with correct video direction automatically.

The camera features affordable innovative 3x optical zoom Lens, F2.0 aperture and auto focus plus 16x digital zoom capability. It assures the video always crisp, focus sharp with proper video size. 92° Wide to 35.8° TELE FOV makes it so flexible to fit various applications.

The Sony Ultra-HD 4K back-illuminated and stacked sensor offers crystal clear and rich color accurate video with improved low light sensitivity. It has 4K HDMI, 3G SDI and NDI output simultaneously with embedded audio.

Streaming on-the-go, turn compact ZowieCAM into NDI enabled real-time, low-latency high-quality video over IP workflow. NDI@|HX3 is even better than or equivalent to USB camera. It allows seamless integration of the camera to any NDI environments over a single network cable. It can also work as a webcam and record video to TF or NAS.

The camera can be powered by any handy USB type C power adapter, any DC power adapter via type C to DC adapter or PoE up to 100 meters. Single cable for Video, Audio, Power and Tally in addition to NDI. All above makes it can be easily installed anywhere.

Build-in rear button can help to setup the camera quickly and conveniently in the field. You can even watch the camera video and setup the camera by the phone besides HDMI or SDI monitor.

The camera has built-in Tally light for multi-camera live production. It supports VISCA over IP or NDI full control from a distance. The Tally can sync to vMix, OBS and Tricaster.

The state-of-art, all-in-one ZowieCAM POVZOOM cameras offer system integrators, streaming professionals, scientific researchers and OEM partners a flexible and affordable solution to stream high quality video over network and video source.



## Highlights :

- ◇ Innovative 3x optical zoom lens with auto focus in POV camera
- ◇ Sony Ultra-HD 4K back illuminated and stacked 1/2.3" sensor
- ◇ Crispily-detail, low noise 4K video
- ◇ Built-in tally light PVW/PGM in multi-camera productions
- ◇ Accurate auto exposure with zone option
- ◇ Auto, manual, color temp, one push white balance
- ◇ Image freeze support
- ◇ Simultaneous 4K HDMI and 3G SDI outputs with embedded audio
- ◇ Up to 4K30 hardware video encoder
- ◇ H.264 HP/MP/BP or H.265/HEVC MP codec
- ◇ NDI@ | HX3 support with better quality and very smallest delay
- ◇ Up to 50mbps bitrate, high bandwidth video stream for best quality
- ◇ NDI@ | HX, RTSP, SRT, RTMP(s) steaming up to 4K30
- ◇ NDI or streaming over WIFI
- ◇ Low latency SRT streaming
- ◇ Direct standalone streaming to CDN like YouTube, no PC required
- ◇ Video scale down, Vertical/Portrait crop and rotation streaming support
- ◇ Simultaneous live out in different RTMP SRT RTSP and multiple CDN
- ◇ Adaptive AAC audio for both embedded audio and analog
- ◇ Analog stereo line in audio input
- ◇ IP VISCA control, NDI@ and Web control
- ◇ Simple setup and configuration via login protected web interface
- ◇ Comprehensive control via by PC, smartphone, iPad, Controller and Panel
- ◇ Live video feed to PC, phone and iPad
- ◇ Flexible WYSIWYG OSD, text, logo and stamp image overlay, user-friendly
- ◇ Easy access and plug-and-play installation by mDNS
- ◇ Automatic rotation for vertical/portrait output and encoding
- ◇ Multiple standard tripod mounts also for vertical/portrait video
- ◇ Handy and convenient USB-C, DC, or single cable PoE power
- ◇ RESTFUL API supported for DIY automation and system integrator
- ◇ With two standard 1/4" camera tripod mount
- ◇ OEM/ODM support

# 4K NDI POVZoom Camera

H.264/H.265 HEVC, Low latency, Multiple Streaming and Live Video Preview

Specification

## Power:

Input : USB TYPE C, 12V DC (Via Adapter)  
Up to 20V 0.5A, 12W and above  
: PoE(802.3af), CAT5e above

Consumption : <12W Max

## Camera:

Sensor size : Sony 1/2.3"  
Back-illuminated and stacked Exmor R CMOS  
Effective Pixels : 8Mega Pixels, 3840(H) x 2160(V)  
Electronic Shutter : AUTO, 1/25, 1/30, 1/50, 1/60, 1/90, 1/100, 1/120, 1/125,  
1/180 1/250, 1/300, 1/350, 1/500, 1/600, 1/725, 1/1000,  
1/1500, 1/2000, 1/3000, 1/4000, 1/6000, 1/10000

Aperture/IRIS : F2.0-3.7, Default factory installed lens  
Gamma Control : 9 options  
Noise Reduction : 2D/3D  
White Balance : Auto, One Push, R/B Gain, Color Temp, Lock  
Color Temp. : 3000-6500K  
Focus : Manual, AF  
Focus Zone : 6 zones and Point Focus  
Exposure : AE/AAE/SAE/M with AE lock  
Gain : 0 ~ 16 steps  
Focal Length : f2.0~3.7  
FOV(D/H/V) : Wide:92°/81.4°/50.5°, Tele:35.8°/31.3°/18.2°  
Distortion < 3%  
Zoom Ratio : 3x  
FOV(D/H/V) : 90°/77.5°/61°, Distortion < -0.5%  
Mirror/Flip : Automatically  
Flicker Cancel : Auto/50/60

## Video:

Video Encoder : H.264 HP/MP/BP, H.265 MP  
Resolution : 4K2160p25/30, 1080p25/30/50/60  
1080i50/60, 720p50/60  
Frame Rate : 24/25/30fps, 50/60fps for 1080/720p  
Codec : H.264/H.265  
Rate Control : CBR/VBR  
Live Preview : Web, HDMI output  
OSD : English/Chinese, WYSIWYG editor

## Network:

LAN : 100/1000Mbps Gigabit  
Web : http, https  
WIFI : 802.11a/b/g/n/ac, Dual Band  
Bluetooth : V5.0

## Streaming:

Streaming Out : RTMP(s)/SRT/RTSP  
Bit Rate : Max. 50mbits/s, adjustable  
NDI@ : NDI@ | HX3/HX2/HX (NDI v5.5, upgradeable)  
Recorder : mp4, mov  
Main Video Stream : Up to 4K  
Secondary Stream : Up to 720p  
Portrait : Vertical streaming

## Video

HDMI Out : 1.4b, 4:2:2(YCbCr)  
SDI Out : 3G SDI, 800mVpp, 75ohm, 4:2:2(YCbCr)  
NDI : NDI | HX, HX2, HX3  
UVC Out : MJPEG, H.264

## Configuration :

Setting : Smartphone, Tablet, PC, RESTFUL API  
OSD : Text, Logo Caption

## Camera Control:

Protocol : VISCA over IP, NDI@ , Web, OnVIF  
Local : Rear 5 button menu control  
WEB : Browser GUI from desktop or mobile

## Audio :

Sampling : 32, 44.1, 48KHz  
Encoder : AAC, MP3, 16bit  
Bitrate : 32-192kbps  
Line Input : 0.7VRMS, 20K, 2CH, AGC  
Source : Line In/MIC  
Audio Embedding : HDMI, SDI and NDI

## Tally:

Tally LED : Auto/Manual

## Storage

Network : TF/NAS  
Recorder : mp4, mov, ts

## Software

Firmware : Upgradeable, Linux OS

## Interface:

Power : 1 x USB TYPE C, PoE  
HDMI Input : 1 x TYPE A, Receptacle, 1.4b  
Audio In : 1 x 3.5mm TRS Jack  
Network : 1 x RJ45, Gigabit, PoE  
USB : 1 x USB, Type C  
Visible : 1 x LED, Rear  
SDI : 1 x BNC Full size  
Tally : 1 x LED, Front

## Physical

Body size : 68.6L x 60.2W x 51H mm(2.7" x 2.36" x 2")  
Weight : 225g (7.9oz) , Black aluminum  
Operating : 0°C to 45°C(32°F to 113°F), Indoor  
Storage : -20°C to 60°C(-4°F to 140°F)  
Mount : 1/4"- 20UNC x2 tripod

## Certification

CE, FCC (In progress)

## Ordering

30561-NZZ  
ZZ =03, 3x  
=25, 25x\*  
=18, 18x\*  
=12, 12x\*  
N =0  
=1, NDI@|HX3

\*Not released

## Accessories

USB TYPE C 25W PD Charger x 1  
USB TYPE C Cable  
Quick Start Guide  
\*Accessories is optional and sold separately

\* All specifications are subject to change without notice.  
\* Accessories may be different for different product options.  
\* Actual object may differ from what shown in catalog.