# CM70-IP

# Avonic PTZ Camera 20x Zoom IP

The Avonic CM70 is a premium-quality PTZ camera that includes a rich feature set usually found only on broadcast-grade cameras including PoE, low latency 3G-SDI and balanced audio embedding.

Optional premium features consist of SRT streaming, a Tally light and a customizable Color Matrix.The camera with IP, HDMI and 3G-SDI outputs is designed for fixed installations and works very well in low light conditions.

The Camera is equipped with high-quality components like a Panasonic High SNR CMOS sensor with digital noise reduction and a High Quality glass lens. Control the camera over IP, RS232 or RS485 with any controller with VISCA or PELCO support.



# Features

### Lens

High-quality glass lens, 20x optical zoom and Horizontal wide: 60.38° – tele: 3.72°, Vertical wide: 35.80° – tele: 2.14°, field of view.

## Low light

High SNR CMOS combined with digital noise reduction for a clear picture under very low light conditions.

## Full HD 1080p60

The camera has a Full HD resolution of 1920 x 1080p60 and achieves a pristine image quality.

## **IP-features**

The camera can be powered using PoE (802.3af) and can be accessed by a WebGUI, controlled by VISCA over IP / Onvif for video streaming.

## **Dual low-latency IP Stream**

H265, H264, optional SRT and MJPEG compression at a bitrate up to 40Mbit, enabling Full HD video stream by ultra-low latency over RTSP, RTMP, UDP, Unicast and Multicast.

## Outputs

3G-SDI, HDMI, USB 2.0 (1080p30) and IP.

## Control

Control the camera with common protocols: VISCA , Pelco-D / P via RS232, RS485, IP (VISCA), Onvif or IR. Remote control included. Supports up to 255 presets with 0.1° accuracy and High-Speed Pan Tilt function.

## Audio embedding

Balanced audio input with embedding into IP stream, SDI, HDMI outputs. Includes configurable audio offset.

#### **Optional Prenium features**

SRT streaming, Tally light, configurable Color Matrix. License AV-LC70-1 sold separately.

# Applications

- Education
   Video Conferencing
   Broadcasting
  - Churches Healthcare
- Courtroom
- Live Events
- And more

# Specifications

## Camera

Video Systems	1920x1080/ 1280x720 p60/ 50/ 30/ 25/ 59.94/ 29.97
Sensor	1/3" CMOS, 2.12mp, 16:9
Shutter	Auto, Manual, 1/25 ~1/10000
Scanning mode	Progressive, Interlaced (not over IP)
Zoom/Aperture/Focal lenght	20x optical/ F1.8-F11/ 4.4-88.8 mm
Minimal Illumination	0.05 LUX
White Balance	Auto, Manual, OnePush, 2400K-7100K in steps of 100K
Backlight Compensation	supported
Backlight Compensation Digital Noise Reduction	supported 2D & 3D DNR
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Digital Noise Reduction	2D & 3D DNR
Digital Noise Reduction Signal Noise Ratio	2D & 3D DNR >55 dB
Digital Noise Reduction Signal Noise Ratio Horizontal FOV wide ~ tele	2D & 3D DNR >55 dB 60.38° ~ 3.72°
Digital Noise Reduction Signal Noise Ratio Horizontal FOV wide ~ tele Vertical FOV wide ~tele	2D & 3D DNR >55 dB 60.38° ~ 3.72° 35.80° ~ 2.14°
Digital Noise Reduction Signal Noise Ratio Horizontal FOV wide ~ tele Vertical FOV wide ~ tele Horizontal rotation	2D & 3D DNR >55 dB 60.38° ~ 3.72° 35.80° ~ 2.14° -170° ~ +170°
Digital Noise Reduction Signal Noise Ratio Horizontal FOV wide ~ tele Vertical FOV wide ~tele Horizontal rotation	2D & 3D DNR >55 dB 60.38° ~ 3.72° 35.80° ~ 2.14° -170° ~ +170° -30° ~ +90°
Digital Noise Reduction Signal Noise Ratio Horizontal FOV wide ~ tele Vertical FOV wide ~tele Horizontal rotation Vertical rotation Pan speed range	2D & 3D DNR >55 dB 60.38° ~ 3.72° 35.80° ~ 2.14° -170° ~ +170° -30° ~ +90° 1.7 ~ 120°/s
Digital Noise Reduction Signal Noise Ratio Horizontal FOV wide ~ tele Vertical FOV wide ~tele Horizontal rotation Vertical rotation Pan speed range Tilt speed range	2D & 3D DNR >55 dB 60.38° ~ 3.72° 35.80° ~ 2.14° -170° ~ +170° -30° ~ +90° 1.7 ~ 120°/s 1.7 ~ 70°/s
Digital Noise Reduction Signal Noise Ratio Horizontal FOV wide ~ tele Vertical FOV wide ~ tele Horizontal rotation Vertical rotation Pan speed range Tilt speed range	2D & 3D DNR >55 dB 60.38° ~ 3.72° 35.80° ~ 2.14° -170° ~ +170° -30° ~ +90° 1.7 ~ 120°/s 1.7 ~ 70°/s supported

# **IP** features

Video coding standard	H.265 / H.264 / MJPEG
H.265 Profiles	main
H.264 Profiles	main, base high
Main stream resolution	1920x1080 / 1280x720
Main stream max frame rate	60fps
Main stream bitrate	64 ~ 40960 Kbps
Sub stream resolution	320x180 / 320x240 / 640x360 / 1280x720 / 1920x1080
Sub stream max frame rate	30fps
Sub stream bitrate	64 ~ 40960 Kbps
Video bitrate type	Variable, Fixed
Support protocols	RTSP, RTMP,ONVIF, SRT, Multicast, Unicast
Audio standard	AAC / mp3 / G.711A
Audio bitrate	32, 64, 96, 128 Kbps
Audio sample rate	16, 32, 44.1, 48 Khz
Audio line in	balanced audio line in via 5-way Phoenix connector.

# Input / Output Interface

HDMI output	1.4
SDI output	3G-SDI, SMPTE 425M level A, 10-bit YCbCr 4:2:2
USB Output	USB 2.0 (max. 1080p30)
Network interface	RJ45 100 Mbit
Serial communication	RS232 mini DIN-8, RS485 2pin Phoenix
Serial control protocol	VISCA, PELCO-P PELCO-D
IP control protocol	VISCA OVER IP, Onvif

# **General Specifications**

Input voltage	12V
PoE	PoE 12W (802.3af)
Power consumption	12W
Power supply	12V2A
Power connector	EIAJ-4 - Philmore 255 plug
Operating temperature	-5°C ~ 40°C
Storage temperature	-20°C ~ 60°C
Operating humidity	20% ~ 95% non-condensing
Bottom fastening screw thread	1/4" 20 UNC
Color	Black, White
Dimensions product wxhxd	133 x 180 x 149 mm. excl.
Weight product	1.5 kg
Dimensions box	26 x 24 x 24 cm
Weight box	2.4 kg
Included	power adapter, remote control, RS232 cable, RS485 2-way Phoenix connector, Balanced Audio, Line-In 5-way Phoenix connector

# Versions

Black	CM70-IP-B
White	CM70-IP-W

# CE Marking

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Product Name: PTZ Camera 20X Zoom Back Package Quantity(unit):1 Serial & MAC ID: 9814D220F278	<b>(</b> € 家
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# Back of the Camera

