

## 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 60.38° horizontal 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 Premium features

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

### Applications

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

# SPECIFICATIONS CM70-IP



## Camera

Resolution	Up to 1080p60
Video Systems	1920x1080/ 1280x720 p60/ 50/ 30/ 25/ 59.94/ 29.97
Sensor	1/3" CMOS, 2.12mp, 1.6:9
Shutter	Auto, Manual, 1/25 ~1/10000
Scanning mode	Progressive, Interlaced (not over IP)
Zoom/Aperture/Focal length	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
Digital Noise Reduction	2D & 3D DNR
Signal Noise Ratio	>55 dB
Horizontal FOV wide ~ tele	60.38° ~ 3.72°
Vertical FOV wide ~tele	35.80° ~ 2.14°
Horizontal rotation	-170° ~ +170°
Vertical rotation	-30° ~ +90°
Pan speed range	1.7 ~ 120°/s
Tilt speed range	1.7 ~ 70°/s
H&V image flip	supported
Number of presets	255
Preset accuracy	0.1

## 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.

Datasheet CM70-IP • © July 2023 • Version 1.4 •  
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## 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
Control	UVC, IR Remote, IP, Serial
Serial communication	RS232 mini DIN-8, RS485 2pin Phoenix
Serial control protocol	VISCA over Serial, PELCO-P, PELCO-D
IP control protocol	VISCA OVER IP, ONVIF, HTTP API

## 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 153 mm excl. connectors
Weight product	1,6 kgs
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

## Compliance

Markings	CE, FCC, cULus
Medical	ENIEC 60601-1-2 (2015) certified (class A, home- and professional healthcare environment)



# Back of the Camera

