



#### WHAT'S IN THE BOX

20X Zoom SDI PTZ Camera  
Power Adapter + Cord  
IR Remote Control  
RS-232C Cable  
User Guide  
Wall mount bracket

#### Main Features:

##### • Image Sensor

- Panasonic 1/2.7", 2.07 million effective pixels, HD CMOS sensor
- Olympus high quality telephoto lens supporting 20X optical zoom and optional 16X digital zoom
- Full HD 1920x1080p resolution up to 60 frames per second
- 2D & 3D noise reduction with our latest "low noise CMOS sensor"
- 0.05 Lux @ F1.8 AGC On
- Wide angle 60.7° horizontal field of view
- Dynamic Range Control (DRC) for higher image quality and detail across simultaneously well lit and shadowed scenes.
- Image Freeze to temporarily pause the video while calling presets (so viewers won't see camera movement)
- High SNR (signal to noise ratio) of the CMOS sensor ( $\geq 55$ dB), combined with 2D & 3D noise reduction algorithms,
- effectively reduces noise, even under low illumination conditions.

##### • Video Outputs:

- Simultaneous IP network streaming, 3G-SDI, and HDMI video outputs.
- 3G-SDI High Definition video output up to 60 frames per second
- HDMI 1.3 High Definition video output up to 60 frames per second
- RTSP, RTMP, & RTMPS streaming using H.264, H.265, & MJPEG
- Line level audio embedding over IP network stream & HDMI. Uses AAC audio encoding for better sound quality and lower bandwidth usage.
- Support for ultra-high FPS mode 1280x720p @ 120 frames per second over IP network stream.
- Supports non-simultaneous CVBS (composite video) output via 3.5mm connector (480i or 576i)

##### • Control and Settings:

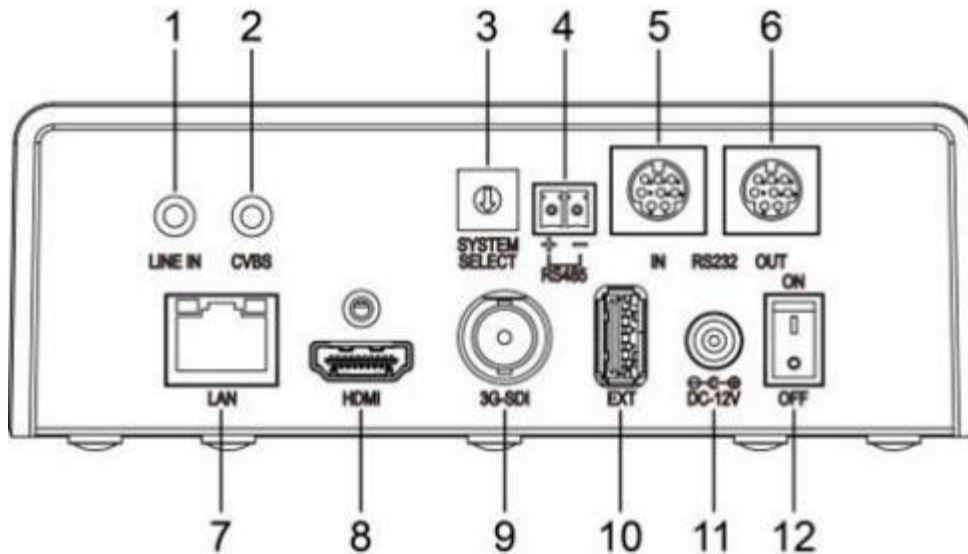
- VISCA overIP
- IR Remote Control
- Web-based IP remote control interface
- RS232 & RS485 VISCA, Pelco-D, & Pelco-P control

## Product Specifications

Camera	
Video System	1080p-60/50/30/25/59.94*/29.97*, 1080i-60/50/59.94*, 720p-60/50/59.94* CVBS: 576i, 480i
Sensor	1/2.7", CMOS, Effective Pixel: 2.07M
Scanning Mode	Progressive
Lens	20x, f4.42mm ~ 88.5mm, F1.8 ~ F2.8
Digital Zoom	16x
Minimal Illumination	0.05 Lux (@F1.8, AGC ON)
Shutter	1/30s ~ 1/10000s
White Balance	Auto, 3000K/Indoor, 4000K,5000K/Outdoor, 6500K_1,6500K_2,6500K_3, One Push, Manual
Backlight Compensation	Support
Digital Noise Reduction	2D & 3D Digital Noise Reduction
Video S/N	≥55dB
Horizontal Angle ofView	3.36°~ 60.7°
Vertical Angle ofView	1.89°~ 34.1°
Horizontal Rotation Range	±170°
Vertical Rotation Range	-30°~ +90°
Pan Speed Range	1.7°~ 100°/s
Tilt Speed Range	1.7°~ 69.9°/s
Image Flip	Support
Image Mirror	Support
Image Freeze	Support
PoE	Support (802.3af)
Local Storage	Support
Number ofPreset	255
Preset Accuracy	0.1°
Input/Output Interface	
HD Output	1 x HDMI: Version 1.3
	1 x 3G-SDI: BNC type, 800mVp-p, 75Ω, Along to SMPTE 424M standard
	1 x RJ45 IP Network streaming 10/100/1000 Ethernet port

SD Output	1 x CVBS: RCA jack, 1Vp-p, 75Ω
Network Interface	1 x RJ45: 10/100/1000M Adaptive Ethernet ports (Support POE)
Audio Input	1-ch 3.5mm audio interface, Line In (IP Network stream only) (Unbalanced stereo)
USB	1 x USB2.0: type A jack
Communication Interface Power Jack	1 x RS-232 IN: 8pin Min DIN, Max Distance: 30m, Protocol: VISCA/Pelco-D/Pelco-P
	1 x RS-232 OUT: 8pin Min DIN, Max Distance: 30m, Protocol: VISCA network use only
	1 x RS-485: 2pin Phoenix port, Max Distance: 1200m, Protocol: VISCA/Pelco-D/Pelco-P
	JEITA type (DC IN 12V)
<b>IP Codec Features</b>	H.264 / H.265 / MJPEG
<b>Video Compression</b>	
Video Stream	Two (2) IP video output streams available (Main Stream, Sub Stream)
First Stream Resolutions	1920x1080, 1280x720, 1024x576, 960x540, 640x480, 640x360
Second Stream Resolutions	1280x720, 1024x576, 720x480, 720x408, 640x360, 480x270, 320x240, 320x180
Video Bit Rate	32Kbps ~ 102400Kbps
Bit Rate Type	Variable Rate, Fixed Rate
Frame Rate	50Hz: 1 FPS ~ 50 FPS, 60Hz: 1 FPS ~ 60 FPS
Audio Compression	AAC
Audio Bit Rate	96Kbps, 128Kbps, 256Kbps
Supported Protocols	TCP/IP, HTTP, RTSP, RTMP, DHCP, Multicast, etc.
<b>Generic Specification</b>	DC 12V / PoE (802.3af) (optional)
<b>Input Voltage</b>	
Current Consumption	1.0A (Max)
Operating Temperature	-10°C ~ 40°C (14°F ~ 104°F)
Storage Temperature	-40°C ~ 60°C (-40°F ~ 140°F)
Operating Humidity	10% - 80%
Power Consumption	12W (Max)
MTBF	>30000h
Size in. (W x D x H)	5.6" W x 6.7" D x 6.5" H (7.8" H w/ max tilt)
Size mm. (W x D x H)	142mm W x 169mm D x 164mm H (168mm H w/ max tilt)
Camera Weight	3.01 lbs [1.35 kg]
Box Weight	5.4 lbs [2.45 kg]

#### Back of the Camera



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|--|---|
| 1. Audio LINE IN Interface (HDMI & IP)           | 7. Network (IP streaming & control)               |
| 2. CVBS (composite video SD) Interface           | 8. HDMI (Digital Video Output)                    |
| 3. System select dial (resolution)               | 9. HD-SDI (Serial Digital Video Output)           |
| 4. RS485 jack                                    | 10. USB 2.0 (*no video out* Future - USB Storage) |
| 5. RS232 IN jack                                 | 11. DC 12V powerjack                              |
| 6. RS232 OUT jack (pass through for daisy chain) | 12. Power switch                                  |