

# hameco

## HV-51 series HD Video Conference Camera

### Full HD, Wide View Angle, Multi-protocols, Multiple Video Interfaces

The HV-51 series camera offers perfect functions, superior performance and rich interfaces. The features include advanced ISP processing algorithms to provide vivid images with a strong sense of depth, high resolution, and fantastic color rendition. It supports H.264/H.265 encoding which makes motion video fluent and clear even under less than ideal bandwidth conditions.



- **Superb High-definition Image**

HV-51 employs **1/2.8 inch** high quality CMOS sensor. Resolution is up to 1920x1080 with frame rate up to 60fps.

- **Multiple Lens**

5X/10X/12X/20X/30X optical zoom, with wide viewing angle of 83.7 ° free distortion.

- **Trinity image auto focus technology**

With image intelligent processing, provide auto white balance (AWB), auto exposure (AE), auto focus (AF) functions, fully automatically adapt to the environment, achieve the best image effect, and achieve the perfect Trinity image auto adjustment.

- **Multiple Video Output Interfaces**

Supports HDMI, SDI, USB, LAN (5GWiFi and POE for option). SDI supports 100m transmission in 1080p60 format.

- **Leading Auto Focus Technology**

Leading auto focus algorithm makes lens a fast, accurate and stable auto-focusing.

- **Low Noise and High SNR**

Low Noise CMOS effectively ensure high SNR of camera video. Advanced 2D/3D noise reduction technology is also used to further reduce the noise, while ensuring image sharpness.

- **Audio Input Interface (for future development)**

Support 8000, 16000, 32000, 44100, 48000 sampling frequency and AAC, MP3, G.711A audio coding.

- **Wide-range, Quiet and Quick Pan/Tilt**

### Mechanism

By adopting step driving motor mechanism, HV-51 camera works extremely quiet and moves smoothly .

- **Multiple Audio/Video Compression**

Support H.264/H.265 video compression; AAC, MP3 and G.711A audio compression; Support compression of resolution up to 1920x1080 with frame up to 60fps.

- **Radio frequency**

with 4x4 MIMO and beamforming technology, up to 300Mbps transmission rate, with strong penetration and long transmission distance; with 4 external antennas, the transmission effect is better.

- **Multiple Network Protocol**

Support ONVIF, RTSP, RTMP, GB/T28181, **NDI** protocols and support RTMP push mode, easy to link streaming media server (Wowza, FMS). Supports RTP multicast mode and visca control protocol of network full command.

- **Control interfaces: RS485, RS232.**

RS232 support Cascade, good for installation.

- **Wide Application**

Tele-education, Lecture Capture, Webcasting, Videoconferencing, Tele-training, Tele-medicine, Interrogation and Emergency command systems.

- **Low-power Sleep Function**

Support low-power sleep/wake up, the consumption is lower than 400mW under sleep mode.

## Order No.

HV-51X-XXX-XXX-XX

IR---IR Remoter  
WR---Wireless Remoter

ST---Standard Interface (5GWiFi and POE for option)

U2---USB2.0 interface **NDI (Optional)**

U3---USB3.0 interface

HD---HDBaseT interface

U2U3--USB2.0, USB3.0, HDMI Interface.

RF---WiFi (Radio frequency) interface

05---5X optical zoom

10---10X optical zoom

12---12X optical zoom

20---20X optical zoom

30---30X optical zoom

S---1080P60 downward compatible

M---1080P30 downward compatible

Model	HV-51-05	HV-51-10	HV-51-12	HV-51-20	HV-51-30
<b>Camera Parameter</b>					
Optical Zoom	5X f=3.1~15.5mm	10X f=4.7~47mm	12X f=3.9~46.8mm	20X f=5.5~110mm	30X f=4.3~129mm
Sensor	1/2.8 inch high quality HD CMOS sensor				
Effective Pixels	16: 9, 2.07 megapixel				
Video Format	<b>HDMI/SDI/HDBaseT video format</b> 1080P60/50/30/25/59.94/29.97; 1080I60/50/59.94; 720P60/50/30/25/59.94/29.97 <b>USB3.0 interface video format</b> 1) U3: 1920X1080P60/50/30/25; 1280X720P30/25/15/10; 960X540P30; 640X360P30 2) U3 compatible with U2: 960X540P30; 640X360P30; 1280X720P10/15; 720X576P30; 720X480P30 <b>USB3.0 is compatible with USB2.0</b> 960×540P30; 640×360P30; 1280×720P10/15; 720×576P50; 720×480P60; 640×480P30; 352×288P30; 800×600P30; <b>USB2.0 interface video format:</b> 176x144/320x240/320x180/352x288/640x480/720x480/720x576/640x360 800X600/960X540/1024X576/1024X768/1280X720/1920X1080 P30/25/20/15/10/5				
View Angle	20°(tele) 83.7°(wide)	6.43°(tele) 60.9°(wide)	6.3°(tele) 72.5°(wide)	3.3°(tele) 54.7°(wide)	2.34°(tele) 65.1°(wide)
AV	F1.8 – F2.8	F1.6 – F3.0	F1.8 – F2.4	F1.6 – F3.5	F1.6– F4.7
Digital Zoom	10X				
Minimum Illumination	0.1Lux				
DNR	2D & 3D DNR				
White Balance	Auto / Manual/ One Push/ 3000K/ 4000K/5000K/6500K				
Focus	Auto/Manual/One key focus				
Aperture/Electronic Shutter	Auto/Manual				

BLC	ON/OFF
WDR	OFF/ Dynamic level adjustment
Video Adjustment	Brightness, Color, Saturation, Contrast, Sharpness, B/W mode, Gamma curve
SNR	>55dB
<b>Input/Output Interface</b>	
Video Interfaces	HV-51-ST Model: SDI, HDMI, LAN, RS232 (In & Out), RS485, A-IN (5G-WIFI and POE, NDI for option) HV-51-U2 Model: USB2.0, LAN, RS232 (In & Out), A-IN HV-51-U3 Model: USB3.0, LAN, RS232 (In & Out), A-IN HV-51-HD Model: HDBaseT (POE), LAN, A-IN, RS232 (In) HV-51-HM Model: HDMI, LAN, RS232 (In) HV-51-U2U3 Model: USB2.0, USB3.0, HDMI, LAN, RS232 (In) HV-51-RF Model: WiFi(Radio frequency), LAN
Video output interface	HDMI, SDI, LAN, USB3.0, USB2.0
Video Compression Format	H.264, H.265, Dual stream output
Control Protocol	VISCA/Pelco-D/Pelco-P; Baud Rate: 115200/9600/4800/2400bps
Audio Input Interface	A-IN: Double track 3.5mm linear input;
Audio Compression Format	AAC/MP3/G.711A Audio compression
HD IP Interface	100M IP Port(10/100BASE-TX); Support VISCA protocol control through IP port.
Network Protocol	RTSP, RTMP, ONVIF, GB/T28181, <b>NDI(Optional)</b>
Power Interface	HEC3800 Outlet (DC12V) 2pin waterproof aviation head power socket (RF model)
Supply Adapter	AC110V-AC220V to DC12V/1.5A
Input Voltage	DC12V $\pm$ 10%
Input current	1A (Max)
Consumption	12W (Max)
<b>Radio frequency parameters (RF Model)</b>	
Operating frequency range	5.1—5.9 (GHz)
Transmitting power	17dBm
Channel bandwidth	40MHz
Modulation mode	OFDM
Transmission distance	$\leq$ 300m (outdoor space is open and unblocked), $\leq$ 150m (indoor space is unblocked)
Transmission data rate	Maximum 300Mbps (determined by transmission distance and channel occupancy)
Anti interference mode	Manual / automatic channel mode selection
<b>PTZ Parameter</b>	
Pan/Tilt Rotation	$\pm$ 170°, -30°~+90°
Pan Control Speed	0.1 -60°/sec
Tilt Control Speed	0.1-30°/sec
Preset Speed	Pan: 60°/sec, Tilt: 30°/sec
Preset Number	255 presets (10 presets by remote controller)
<b>Other Parameter</b>	
Storage temperature	-10°C ~ +60°C

Storage humidity	20%~95%
Working temperature	-10℃~+50℃
Working humidity	20%~80%
Dimension	150mmX150mmX167.5mm 150mm×150mm×180mm (RF Model)
Weight	1.4KG
Remote Operation (IP)	Remote Upgrade, Reboot and Reset
<b>Accessories</b>	
Accessories (with camera)	12V/1.5A power supply, RS232 cable, USB3.0 cable (model U3), USB2.0 cable (model U2), remote control, manual, warranty card
Optional accessories	Wall mount

## Interface Diagram :



HV-51-ST



HV-51-U2U3



HV-51-U2



HV-51-U3



HV-51-HDBASET



HV-51-5G WIFI

### Dimension(mm):

