Specification

Product Name: 20x HD PTZ Camera

Product Model：HY-HD320

Document Version：A/1（2024.4.15）

Production Department: Product Department

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1、Product Overview

1.1 Product Image

1.2 Dimensions and Weight

Chassis Dimensions (LxWxH)	253.5*144*169mm
Packaging Dimensions (LxWxH)	320*200*240mm
Weight	Approximately 1.46 kg
Packaging Method	Foam + Carton

2、Functional Parameters

1. Uses a 1/2.8" high-quality image sensor with 2.07 million effective pixels, maximum resolution of 1920×1080, and output frame rate up to 60 fps.

2. Features an industry-leading wide dynamic range CMOS sensor with a focal length of f=5.5mm to 110mm, aperture range of F1.6 to F3.5, 20x optical zoom, and 10x digital zoom lens, with a field of view ranging from 51.4° (3.3°-54.7°).

3. Horizontal rotation angle of -170° to +170°, speed of 0.1 to 100°/s, and vertical tilt angle of -30° to +30°, speed of 0.1 to 45°/s.

4. Advanced autofocus algorithm for quick, accurate, and stable autofocus.

5. Based on 2D and motion 3D noise reduction algorithms, and uses a new generation low-noise sensor to effectively reduce noise and provide a clean and detailed image.

6. Employs high-precision stepper motors and a precision motor driver controller to ensure smooth and noiseless pan-tilt operations.

7. Supports sampling frequencies of 8000, 16000, 32000, 44100, and 48000 Hz, and audio codecs including AAC, MP3, and G.711A.

8. Low power sleep function: Supports low-power sleep/wake modes, with power consumption less than 400mW during sleep.

9. Supports video/audio outputs via DVI (HDMI), HDMI, SDI, USB2.0, USB3.0, and wired LAN.

10. Supports H.264+/H.264 video compression and AAC, MP3, PCM audio compression.

11. Supports ONVIF, GB/T28181, RTSP, RTMP protocols, and RTMP push mode for easy connection to streaming media servers (Wowza, FMS).

12. Built-in gravity sensor supports automatic pan-tilt flipping function for easy installation.

13. Advanced autofocus algorithm for fast, accurate, and stable autofocus.

14. Supports VISCA, PELCO-D, and PELCO-P protocols, with automatic protocol recognition and full network command VISCA control protocol.

15. RS-485 control method with RS-232 cascading support for convenient installation.

16. Supports up to 255 preset positions (10 preset positions via remote control).

3、Technical Parameters

Image Sensor	1/2.8-inch high-quality CMOS sensor
Effective Output Pixels	2.07 million pixels, 16:9
Video Signal	1080P；1080I；720P
Optical Zoom	20x optical zoom, f=5.5～110mm
Field of View	3.3° (narrow) to 54.7° (wide)
Aperture	F1.6～F3.5

Digital Zoom	10x
Minimum Illumination	0.5Lux(F1.8, AGC ON)
Digital Noise Reduction	2D, 3D digital noise reduction
Wide Dynamic Range	OFF/dynamic range adjustment
Video Adjustment	Brightness, chroma, saturation, contrast, sharpness, black and white mode
Signal-to-Noise Ratio	>55dB
Video Interfaces	DVI（convertible to HDMI）、SDI、USB3.0、USB2.0、LAN
Video Compression Formats	H.265、H.264
Control Signal Interfaces	RS-232, with loop-through RS-232 output, supports RS-485
Control Protocols	VISCA/Pelco-D/Pelco-P
Network Interfaces	100M Ethernet; 5G WiFi (optional)
Network Protocols	RTSP、RTMP、ONVIF、GB/T28181
Rotation Angles:	Horizontal: -170° to +170°, Vertical: -30° to +30°
Control Speed	Horizontal: 0.1 to 100°/s, Vertical: 0.1 to 45°/s
Preset Position Speed:	Horizontal: 100°/s, Vertical: 45°/s
Number of Presets	Up to 255 preset positions (10 via remote control)
Power Adapter	Input AC100V-AC240V, Output DC12V/1.5A
Input Current	1A (maximum)
Power Consumption	12W (maximum)