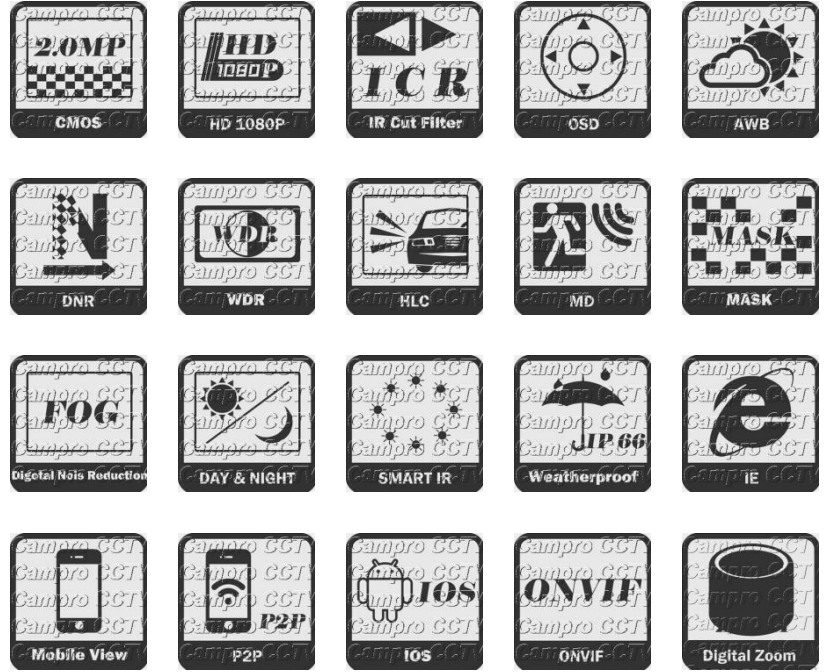
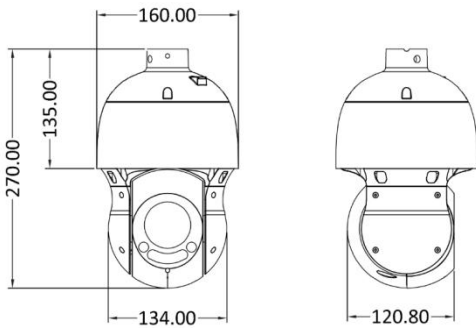


2MP 20X Starlight PTZ Network Camera



- 1/2.8" Progressive Scan 2MP CMOS
- 5.5~110mm, 20X Optical Zoom, 16X Digital Zoom
- Starlight Technology
- Auto tracking of all moving targets
- Optional: Smart AI (Intrusion, Tripwire, Face Detection, SMD)
- Optional: (Red and Blue Warning Lights, Built in Mic., Audio & Alarm I/O)
- IR distance up to 120M

Model No.	CB-20X-1220
Camera	
Digital Video Processor	1/2.8" 2MP CMOS Sensor
RAM & ROM	128M RAM / 128M ROM
Frame Rate	1920*1080
Minimum Illumination	Color: 0.001Lux@F1.5(AGC ON), B/W: 0.0005 Lux@F1.5(AGC ON)
Shutter Speed	Auto / 1/25s-1~100'000s
Slow Shutter	Support
Aperture	DC drive
Day & Night Switch	Auto, Dual IR-Cut Filter (Day / Night / Auto / Schedule)
IR Illuminator / Wavelength	Up to 120M / 850nm
LENS	
Lens Type	5.5~110mm Motorized 20X Optical Zoom Lens
Optical Zoom	20X

Digital Zoom	16X				
Focus Control	Auto / Semi-Auto / Manual				
Iris Control	Auto Iris				
Aperture Value	Max. F1.7~F3.7				
F.O.V.					
Field of View (H)	57.6°~3.4° (Wide~Tele)				
Field of View (V)	34.4°~2.0° (Wide~Tele)				
Field of View (D)	64.5°~3.9° (Wide~Tele)				
Minimum Working Distance	100mm~1500mm				
Zoom Speed	Approximately 3s				
DORI					
DORI	Lens (mm)	Detect (m)	Observe (m)	Recognize (m)	Identify (m)
	5.5mm	43	43	21	17
	110mm	2328	930	465	232
Compression Standard					
Video Compression	H.265 Main Profile / H.264 High Profile / H.264 Main Profile / H.264 Baseline Profile / MJPEG				
Video Bit Rate	32Kbps~16Mbps				
Audio Compression	G.711a / G.711u / G.722.1 / G.726 / MP2L2 / AAC / PCM				
Audio Bit Rate	64Kbps(G.711) / 16Kbps(G.722.1) / 16Kbps(G.726) / 32-192Kbps(MP2L2) / 16-64Kbps(AAC)				
Image					
Max. Resolution	1920*1080@25/30fps				
Main Stream	50/60Hz: 30/25fps(1920*1080/1280*960/1280*720)				
Sub Stream	50/60Hz: 25fps/30fps(1280*720/640*480/352*288)				
Third Stream	50/60Hz: 25/30fps(704*576/640*480/352*288)				
Image Setting	Saturation, Brightness, Contrast, Sharpness adjustable by Client Soft. Or Browse				
Exposure Mode	Auto Exposure / Aperture Priority / Shutter Priority / Manual Exposure				
Focus Mode	Auto Focus / One Focus / Manual Focus / Semi-Auto Focus				
Area Exposure / Focus	Support				
Gain Control	Auto / Manual				
BLC / White Balance	BLC: On/Off, White Balance: (Auto / Manual / Lock)				
Defog	Support				
Day/Night Switch	Auto, Manual, Timing, Alarm Trigger				
Flip	Normal / Flip Vertical / Flip Horizontal / 180° / 90°Clockwise / 90°Anti-clockwise				
HLC	Support				
Image Stabilization (EIS)	Support				
DNR	3D DNR				
WDR	≥ 140dB				
S/N Ratio	≥ 60dB				
Picture Overlay Switch	Support BMP 24-bit image overlay, customizable area				
Region of Interest	Support 3 streams and 4 fixed areas				
Privacy Mask	On/Off, (8 Areas, Rectangle)				
Network					

Protocols	IPv4/IPv6, HTTP, HTTPS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTP, TCP/IP, UDP, DHCP, PPPoE,
API	Onvif (Profile S, Profile G)
Baud Rate	1200 / 2400 / 4800 / 9600bps (Default:115200bps)
Streaming Method	Unicast / Multicast
Simultaneous	Live View Up to 9 Channels
User/Host	5 Users
Security	Password Protection, Complicated Password, HTTPS Encryption, IP Address Filter, Control Timeout Settings
Video Management Software	IE / Web / PC Client Software / App
WEB	IE10/11, Safari V12.1 above, Firefox V.52 above, Google Chrome V.57 above, Edge V.79 above
Mobile Client	iOS, Android
P2P	Support iOS / Android / PC
PTZ	
Horizontal Rotation Range	0~360°
Horizontal Rotation Speed	Pan Speed: Configurable from 0.1° to 200°/s; Preset Speed: 200°/s
Tilt Rotation Range	-18~90° (Auto Flip)
Tilt Rotation Speed	Tilt Speed: Configurable from 0.1° to 200°/s; Preset Speed: 200°/s
Preset Points	255
Patrol Scan	6 Patrols, up to 18 Presets per patrol
Pattern	4 Patterns, with total recording time not less than 10mins
A-B Scan	User Programmable
A-B Scan Speed	8 Levels Setting Available (1-8)
3D Positioning	Support
PWR On Action	Memory / Pattern 1 / Tour 1 / 360° Scan / A-B Scan / Preset 1-18 / None
Park Time	5~720s available
Dwell Preset	10~120s available
Power-Off Memory	Support
Anti-Flash	50Hz / 60Hz
Infrared	
IR distance	Up to 120M
IR intensity	Automatically adjusted, depending on the zoom ratio
Interface	
Ethernet Interface	RJ45*1, 10M/100M self-adaptive
Storage	Support 256G Micro SD / SDHC / SDXC offline local storage, NAS (NFS, SMB / CIFS support)
Alarm	1CH Input, 1CH Output (Optional)
Audio	1CH Input, 1CH Output (Optional)
Alarm	
Snapshot	Remote Timing Snapshot, Mobile View Images Snapshot
Motion Detection	Intelligent Multiple Detection Zones (Max. 4 Zones)
Alarm Linkage	E-mail Alert and Upload Snapshot to FTP, Relay Out, Mobile Phone App
Event	
Basic Event	Motion Detection, Alarm Input and Output

Intelligence	
Face Detection	Supported
Smart Motion Detection	Supported
Perimeter Protection	Intrusion, Tripwire (support the classification of Human and Vehicle & Non Motor)
Smart AI Function	Area Intrusion, Cross-Border Detection, Entering/Leaving Area Detection, Hovering Detection, Parking Detection, Personnel Gathering Detection, Scene Change Detection
Smart Tracking	Auto Tracking
Alarm Linkage	Upload to FTP, E-mail, Trigger Alarm Output, Trigger Recording
General Parameter	
Operating Temp.	Indoor: 0~40°, Outdoor: -40°~+65°
Humidity	≤ 95% Non Condensing
Power	AC 24V
Power Consumption	≤ 36W
Dimension	270(W)*160(H)mm
Weight	3.5KG
Protection Level	IP66, TVS 4000V Lightning Protection, Surge Protection
Mounting Bracket	Wall Mount Bracket or Ceiling Mount Bracket
Approvals	
Certification	CE / FCC / RoHS
EMC	CE-EMC:2014/30/EU, EN55032:2015+AC: 2016, EN55035:2017
FCC	FCC Part15 subpart B Procedure : ANSI C63.4-2014
RoHS	ROHS: (EU) 2017/2012 IEC62321:2013
ISO	ISO9001