

## HWT-M2120-10-EI

1T 2MP IR AI Bullet Camera



### Features

- ▶ 1 TOPS computing power
- ▶ Supports behavior analysis, crowd flow analysis, target detection, person detection, object (motor vehicle, non-motorized vehicle, and pedestrian) classification, vehicle recognition, vehicle event detection, and traffic flow statistics
- ▶ Supports backlight adaptation, overcast adaptation, and speed adaptation
- ▶ 1/2.7" CMOS sensor
- ▶ Online loading and upgrade of algorithms
- ▶ 120 dB super wide dynamic range (WDR), ensuring that both foreground and background objects are clearly identified in environments with sharp light contrast
- ▶ Supports auto iris

## Technical Specifications

Model		HWT-M2120-10-EI				
Major Specifications						
Main control	Computing power	1 TOPS				
	Memory	DDR3 0.5 GB				
	Flash type	SPI NAND Flash 512.0 MB				
Camera	Focal length	2.8-12mm				
	Max Aperture	F1.6 (W) to F3.4 (T)				
	Image sensor	1/2.7" CMOS/2MP 1920(H)*1080(V)				
	Lens aperture type	DC-Iris				
	Angle of view	Horizontal: 42° (T) to 95.5° (W); vertical: 24° (T) to 52° (W)				
	IR range	50m				
	Digital Zoom/Optical Zoom	Not Supported/4X				
	DORI (Complied to the EN 62676-4)		D(m)	O(m)	R(m)	I(m)
		W	48.3	19.5	9.7	4.8
		T	132.4	53.4	26.5	13.2
Intelligence						
Target/Body	Target	Target detection/Target attribute recognition				
	Person	Person detection				
Vehicle	License plate recognition	License plates from the Chinese Mainland				
	Vehicle analysis	Vehicle color/Vehicle type/Vehicle model				
	Traffic flow statistics	Motor vehicle/Non-motorized vehicle/Pedestrian				
Other intelligences	Behavior analysis	Fast movement/Tripwire crossing/Intrusion/Area entry or exit /Loitering				
	Crowd flow analysis	Queue length/Head counting/Crowd flow statistics				
	Non-motorized vehicle	Supported				
	Defocus	Supported				
Open ecosystem						
Algorithm openness	Open OS	Supported				
Data openness	Data openness	SDK (proprietary protocol)/REST API (proprietary protocol)/GA/T 1400/GB/T 28181 (2011, 2016) /ONVIF Profile S/G/T				
Image						
Codec	Video encoding format	MJPEG/H.264/H.265				
	Video encoding channels	Triple streams				
	Intelligent encoding	Extra265/264				
	Video frame rate	Configurable (60 fps, 50 fps, 30 fps, or 25 fps)				
Image AI	Scene adaptation	Backlight adaptation/Overcast adaptation/Speed adaptation				
	Min illumination	Color: 0.005 lux (F1.2, AGC ON, 1/30s shutter speed); B/W: 0.0005 lux (F1.2, AGC ON, 1/30s shutter speed) or 0 lux (infrared illuminator enabled)				
	Day/Night mode	Supported; automatic (ICR)/Color/B/W (default: automatic) Sensitivity level: high (default), medium, and low Image triggering /Internal triggering				

Image ISP	WDR	120db
	White balance	Auto/Manual/OnePush
	HLC/BLC	Supported/Supported
	Digital noise reduction	2D/3D noise reduction
	Signal-to-Noise Ratio(SNR)	Signal-to-Noise Ratio >45 dB
	Shutter speed	Supports slow shutter. Slow shutter speed levels: 1/3, 1/4, 1/8, 1/12, 1/15 Non-slow shutter speed levels: 1/25,1/30,1/50,1/60,1/90,1/100,1/120,1/125,1/180,1/250,1/350,,1/500,1/725 ,1/1000,1/1500,1/2000,1/3000,1/4000,1/6000,1/10000,1/30000,1/100000, custom  Default: 1/25
	Primary stream resolution	1920×1080(1080P),1280×720(720P)
	Secondary stream resolution	Secondary stream 1: 1920×1080(1080P), 1280×720(720P), 720×576(PAL), 720×480(NTSC) ; Secondary stream 2: 720×576(PAL), 720×480(NTSC), 352×288(PAL), 352×240(NTSC)
	Video bit rate	Only for H.264 and H.265: 1080P~4K 512Kbps ~ 16Mbps 720P 384Kbps ~ 8Mbps D1 256K ~ 4Mbps CIF 32K ~ 1Mbps
	Smart Illumination	Not Supported
Optical Defogging/Algorithm-assisted Defogging	Not Supported/Supported	
EIS	Supported Sensitivity levels are not supported.	

#### Audio

Audio	Audio Encoding Format	G.711a/G.711u/G.726/OPUS
	Audio sampling rate	G.711a/G.711u/G.726 : 8K OPUS : 8K/12K/16K/24K/48K
	Audio bit rate	G.711a/G.711u:64kbps;G.726:16、24、32、40kbps OPUS:16/24/32/40/64/96/128/160/192/224/256/288Kbps

#### Networking

Network transmission	Protocols supported by IPv4	TCP, UDP, IPv4, DHCP, DNS, ICMP, IGMP, HTTPS, FTP, SFTP, RTP, RTSP, RTCP, SIP, ARP, SSL, NTP, SNMP (V1/V2/V3), 802.1x, QoS, SMTP, and PPPoE. Note: The northbound protocol needs to adapt to the PPPoE dialup scenario.
	Protocols supported by IPv6	HTTPS,RTP,RTCP,RTSP,Onvif,IPv6,ICMPv6,DHCPv6

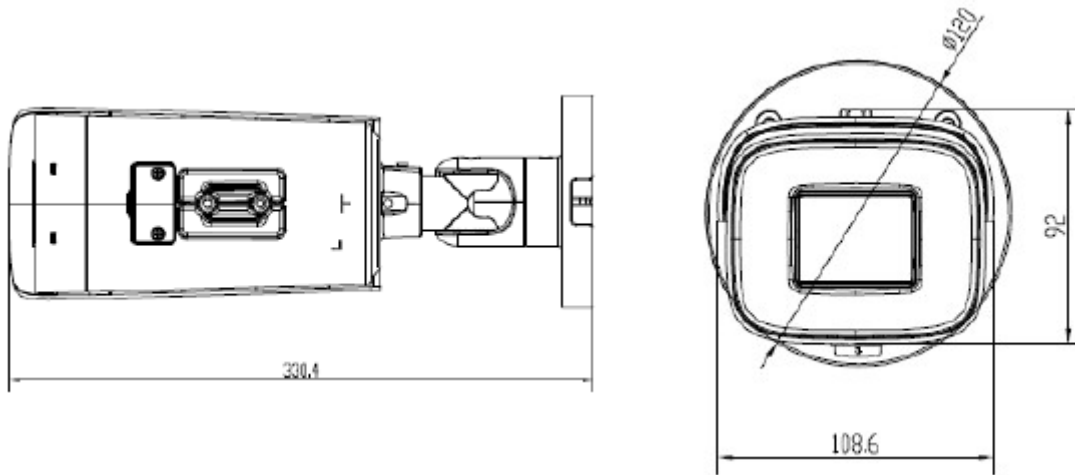
#### Security

Data security	Media security	Supports web- or SDK-based media stream encryption. By default, RTSP uses MD5 digest authentication. Supports encrypted storage of up to two channels of streams. By default, RTSP uses MD5 digest authentication. Supports encrypted storage of data in SD cards. By default, RTSP uses MD5 digest authentication . By default, RTSP uses MD5 digest authentication.
Service security	User rights	Three user roles: administrator, advanced operator, and common operator
	Security mode	User name and password authentication, 802.1X authentication, and HTTPS digital certificate
	Secure boot	Supported
	System intrusion detection	Supported

Port	
Storage port	MicroSD card slot that supports microSDHC/microSDXC; maximum memory card capacity: 256 GB
Alarm port	2 input ports and 1 output port
Network port	One RJ45 10M/100M adaptive Ethernet port
Communication serial port	RS-485 port
Audio port	Supported (one-channel LINE IN or one-channel external MIC)/Supported (one-channel LINE OUT)

General Specifications	
Power type	12 V DC and PoE (IEEE 802.3af)
Power consumption	Maximum: 13 W; typical: 5 W
Operating temperature	-30°C to +60°C (illuminator disabled) -30°C to +40°C (illuminator enabled)
Operating humidity	5% to 95% (non-condensing)
Surge protection	4 kV
IP rating	IP67
Equipment Anti Corrosion	Class C corrosion resistance
IK rating	IK10
Weight	Net weight 1.4 kg;Gross weight 1.8 kg
Dimensions	Device dimensions 330.4mm×108.6mm×92mm;Package dimensions 182 mm x 376 mm x 139 mm

## Dimensions



## Recommended Accessories



ACC3213



ACC3231

## HOLOWITS Contact

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