

## HWT-M1281-10-Q-FA

2T 8MP AI Box Camera



### Features

- ▶ 2 TOPS computing power
- ▶ Supports omni-data structuring, multi-algorithm switchover, 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
- ▶ 1/1.8" 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 switchover among multiple algorithms
- ▶ Supports omni-data structuring

## Technical Specifications

Model HWT-M1281-10-Q-FA		
Major Specifications		
Main control	Computing power	2 TOPS
	Memory	DDR4 2.0 GB
	Flash type	SPI NAND Flash 512.0 MB
	Max capacity	MicroSD card slot that supports microSDHC/microSDXC; maximum memory card capacity: 256 GB
Camera	Image sensor	1/1.8" CMOS/8MP 3840(H)*2160(V)
	Focal length	3.8-16/11-50mm
	Lens aperture type	DC iris (drive impedance $\geq$ 190 ohms; braking impedance $\geq$ 500 ohms)
Intelligence		
Target/Body	Target	Target detection/Target enhancement/Target attribute recognition
	Target recognition	Supported
	Person	Person detection/Personal attribute recognition
Vehicle	Vehicle analysis	Vehicle color/Vehicle type/Vehicle model
	Traffic flow statistics	Motor vehicle/Non-motorized vehicle/Pedestrian
Other intelligences	Omni-Data Structuring	Supported
	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
	Multi-algorithm switchover	Supported
	Defocus	Supported
Alarm information	No SD card; SD card full; SD card error; Network disconnection; Defocus detection; IP Address Conflict Detection	
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 (25 fps or 30 fps)
Image AI	Scene adaptation	Backlight adaptation/Overcast adaptation/Speed adaptation
	Min illumination	Color: 0.015 lux (F1.2, AGC ON, 1/30s shutter speed); B/W: 0.0075 lux (F1.2, AGC ON, 1/30s shutter speed)
		Supported; automatic (ICR)/Color/B/W (default: color); Sensitivity

## Image ISP

Day/Night mode	level: high (default), medium, and low; Image triggering/Internal triggering
WDR	120 dB
White balance	Auto/Manual/OnePush
HLC/BLC	Supported/Supported
Digital noise reduction	2D/3D noise reduction
Shutter speed	1/3s to 1/68250s drop-down list box: 1/3, 1/4, 1/8, 1/12, and 1/15; Non-slow shutter level: 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; The default value is 1/100. The default value for micro checkpoint mode is 1/250, the default value for full intelligence mode is 1/250, and the default value for behavior analysis is 1/25.
Signal-to-Noise Ratio(SNR)	>45dB
Primary stream resolution	3840×2160(4K),3072×1728(5MP),2560×1440(4MP),2304×1296(3MP),1920×1080(1080P),1280×720(720P)
Secondary stream resolution	Secondary stream 1:1920 x 1080 (1080p), 1280 x 720 (720p), 720 x 576 (PAL), 720 x 480 (NTSC) Secondary stream 2:720 x 576 (PAL), 720 x 480 (NTSC), 352 x 288 (PAL), 352 x 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	Supported/Supported
Signal-to-Noise Ratio(SNR)	
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 kbit/s, 24 kbit/s, 32 kbit/s, or 40 kbit/s 16/24/32/40/64/96/128/160/192/224/256/288Kbps: configurable

## Networking

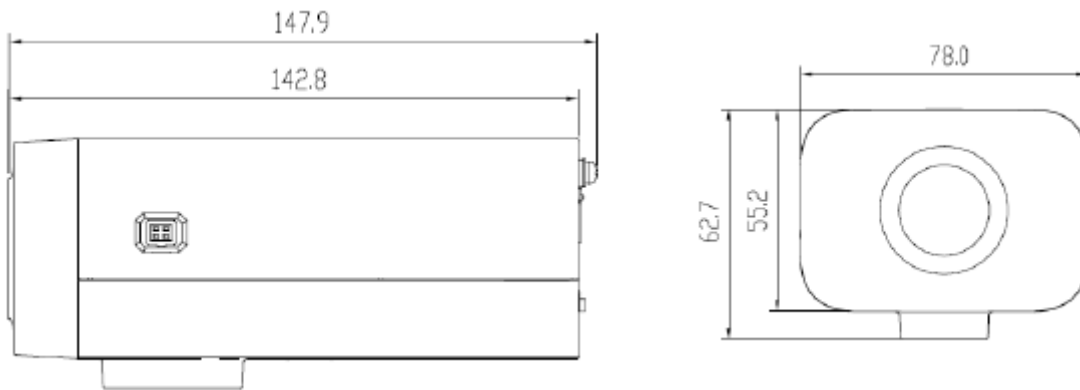
Network transmission	Protocols supported by IPv4	TCP, UDP, IPv4, DHCP, DNS, ICMP, IGMP, HTTPS, FTP, SFTP, RTP, RTSP, RTCP, SIP, ARP, SSL, NTP, SNMP (V1/V2/V3), 802.1x, QoS, SMTP, and PPPoE. Note: The northbound protocol needs to adapt to the PPPoE dialup scenario.
	Protocols supported by IPv6	HTTPS,RTP,RTCP,RTSP,Onvif,IPv6,ICMPv6,DHCPv6

Security		
Data security	Media security	Supports web- or SDK-based media stream encryption; supports a maximum of two channels of encrypted media streams; supports encrypted data storage on SD cards
	Video digital watermark	Supported
	Image digital watermark	Supported
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	1input port and 1output port
Network port	One RJ45 10M/100M/1000M adaptive Ethernet port
Communication serial port	RS-485 port
Optical port	One SFP slot
Audio port	Supported (one-channel LINE IN or one-channel external MIC)/Supported (one-channel LINE OUT)

General Specifications	
Power type	12 V DC, 24 AC, and PoE (IEEE 802.3af)
Power consumption	Maximum: 8.2 W; typical: 7.3 W
Operating temperature	-30°C to +60°C
Operating humidity	5% to 95% (non-condensing)
Surge protection	4 kV
Weight	Net weight 589 g;Gross weight 778 g
Dimensions	Device dimensions 153 mm x 78 mm x 62 mm (excluding the lens);Package dimensions 108 mm x 230 mm x 125 mm

## Dimensions



## Recommended Accessories



ACC3280



ACC3211



ACC3282



ACC3217



ACC3231

## HOLOWITS Contact

Address : 6 Temasek Boulevard, 29th Floor, Suntec Tower Four, Singapore  
038986

Web : [www.hollowits.com](http://www.hollowits.com)

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