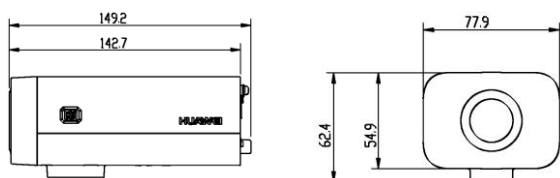# M1281-Q

8MP Multi-Algorithm Box Camera

Features

- 1/1.8" progressive scan CMOS
- AI-enabled scene adaptation. The camera can identify scenes in real time and make targeted setting optimization to improve imaging quality.
- Detection and capture of faces, persons, and vehicles in scenes with mixed objects
- Intelligent object detection algorithms based on deep learning. The camera can detect up to 50 objects at a time, including motor vehicles, non-motor vehicles, and pedestrians.
- Simultaneous extraction of multiple types of structured data, such as faces, persons, and vehicles
- Facial attribute recognition and personal attribute recognition
- License plate, vehicle type, and vehicle color recognition
- Vehicle brand, sub-brand, and model year recognition
- Recognition of new-energy license plates and unlicensed vehicles
- Software-defined camera, supporting online loading and upgrade of algorithms
- Area cropping, allowing users to view fine details at a limited bandwidth
- Stream smoothing, meeting various requirements for video quality and fluency
- Traffic shaping, enabling precise control over instantaneous burst of video streams and delivering smooth video without packet loss
- TCP acceleration, enabling the network to carry video streams of higher quality

Dimensions

Unit: mm

Recommended Accessories

Specifications

Product Model	M1281-Q
Camera	
Image sensor	1/1.8" 8-megapixel progressive scan CMOS
Effective pixels	3840 x 2160
Minimum 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)
Day/Night mode	Automatic ICR, color, or B/W
Shutter speed	1/68250s to 1/3s
Gain control	Auto/Manual
Wide dynamic range (WDR)	120 dB, physical WDR
Backlight compensation (BLC)	Supported (BLC area is selectable)
Highlight Compensation (HLC)	Supported
Image defogging	Auto/Manual/Off
White balance	Auto tracking/Auto/Manual/
Digital noise reduction (DNR)	2D/3D noise reduction
Focus assistance	Supported
Lens	
Lens mount	CS-mount
Iris type	DC-Iris
Function	
Video encoding format	H.265 / H.264 / H.264 smart codec / MJPEG
Maximum resolution	3840 x 2160
Frame rate	1 fps to 30/25/20 fps
Multi-channel encoding	Five streams, supporting 1080p encoding for secondary streams
Area cropping encoding	4-channel encoding (secondary streams)
Intelligent encoding	Extra265/264
Audio encoding format	G.711a/G.711u/G.726/OPUS/ACC
Camera connection protocol	ONVIF Profile S/G/T, GB/T 28181-2011/2016, GA/T 1400-2017, and GB 35114-2017
Network protocol	TCP, UDP, IPv4, IPv6, DHCP, DHCPv6, DNS, ICMP, ICMPv6, IGMP, HTTPS, FTP, SFTP, RTP, RTSP, RTCP, SIP, ARP, SSL, NTP, SNMP, 802.1X, QoS, DDNS, SMTP, SSH, and TLS
Security mode	User name and password authentication, 802.1X, HTTPS digital certificate, and flood attack prevention
Network intrusion alarm	Brute force attack detection, unauthorized super user detection, and botnet detection
Media security	KMC key encryption, AES256-based stream encryption, and digital watermark
Alarm linkage	Alarm source: motion detection/lens blocking/Boolean value input/intelligent analysis alarms Linked action: Boolean value output/preset position/tour track/scan/SD card–based recording/SD card–based snapshot/email sending/pre-recording
Intelligent Function	
Exception detection	Video quality diagnosis, audio existence detection, sudden volume increase or decrease detection, scene change detection, and defocus detection
Intelligent analysis	
Intelligent capture mode switching	Supports switching among the following four modes: object classification, face checkpoint, vehicle checkpoint, and situation awareness.
Object classification	Classification and capture of motor vehicles, non-motor vehicles, and pedestrians
Vehicle analysis	Recognition of license plates, vehicle types, colors, brands, sub-brands, model years, license plates for new-energy vehicles, and unlicensed vehicles; traffic flow statistics
Secondary vehicle feature analysis	Seat belt infractions, handsfree device infractions, sun visor, annual inspection sticker, hanging accessory, tissue box; driver/front passenger face capture
Vehicle event detection	Motor vehicles on non-motor vehicle lanes, non-motor vehicles on motor vehicle lanes, illegal backing, wrong-way driving, marked lanes violation, parking violation, parking detection
Person detection	Simultaneous detection and optimal snapshot of face, head and shoulder, and person
Personal attribute analysis	5 facial attributes (for example, whether wearing a mask); 7 personal attributes (for example, gender, age, and tops style); rider attribute analysis; customer flow statistics
Behavior analysis	Fast movement detection, abandoned object detection, removed object detection, tripwire crossing detection, intrusion detection, area entry/exit detection, and loitering detection
Crow flow analysis	Head counting, queue length detection, crowd density detection, crowd gathering detection, and heat map
Port	
Network port	One RJ-45 10M/100M adaptive Ethernet port
Communication serial port	One RS-485 port
Alarm port	1 alarm input port and 1 alarm output port
Audio port	1 audio input port and 1 audio output port
Storage port	One microSDHC/microSDXC card slot, supporting a maximum capacity of 256 GB
General Specifications	
Power supply	12 V DC, 24 V AC, PoE+ (IEEE 802.3at)
Power consumption	Maximum: 9 W; Typical: 7.5 W
Operating temperature	–40°C to +60°C
Operating humidity	5% to 95% (non-condensing)
Surge protection level	4 kV
Weight (excluding lens)	Net: 0.5 kg; gross: 0.7 kg
Dimensions (excluding lens)	Product (H x W x D): 149.2 mm x 78.0 mm x 62.5 mm; Packing (H x W x D): 230 mm x 125 mm x 108 mm

IPC6256-VRZ

5MP Network IR Bullet Camera

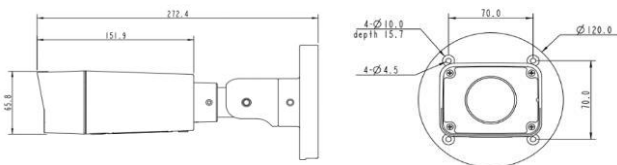| H.265	120 dB WDR	Highlight suppression	Defog
Intelligent analysis	AES encryption	Scene switch	Wide voltage range

Features

- 1/2.7" 5.0 megapixel progressive scan CMOS
- A maximum of 30fps stream at 5.0 megapixel with H.265 real-time encoding
- H.265, H.264 and MJPEG video compression standard
- Wide dynamic range up to 120dB
- Defogging
- Built-in motorized zoom and focus lens
- Max. 50 meters IR coverage
- Super error concealment (SEC)
- Streams encrypted through AES
- Ultra wide operating voltage range, ultra wide operating temperature range
- DC and POE power supplies

Dimension

Unit : mm

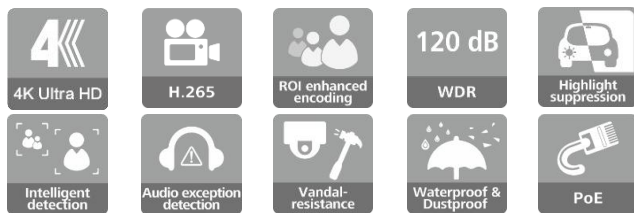## Optional Accessories

Pole-mount bracket
DTS-11C

Connection box
ACC2501-HW

Specifications

Model Item	IPC6256-VRZ
Camera	
Image sensor	1/2.7" 5.0 megapixel progressive scan CMOS
Effective pixels	2560(H)×1920(V)
Min. Illumination	Color: 0.005lux (F1.2, AGC ON) B/W : 0.001lux (F1.2, AGC ON), 0 lux with IR on
Day/Night mode	Automatic ICR/Color/Monochrome
Wide Dynamic Range	120dB
White balance	Auto/Auto-track/Manual
Highlight suppression	Supported
Defog	Automatic/Manual
Digital noise reduction	Self-adaptive to 2D or 3D DNR
Lens	
Focal Length	2.8-12mm
Infrared radiation distance	50 m
Function	
Video compression	H.265 / H.264 / H.264 Smart Codec / MJPEG
Max. resolution	2560(H)×1920(V)
Frame rate	60Hz:30fps(2560×1920，2560×1440，2048×1536、1920×1080) 50Hz:25fps(2560×1920，2560×1440，2048×1536、1920×1080)
Multiple streaming	Three streams
PU access protocol	ONVIF Profile S/G/T,GB/T 28181 and HUAWEI SDK
Network protocol	TCP，UDP，IPv4，IPv6，DHCP，DHCPv6，DNS，ICMP，ICMPv6，IGMP，HTTPS，FTP，SFTP，RTP，RTSP，RTCP，SIP，ARP，SSL，NTP，SNMP，802.1x，QoS，DDNS，SMTP，SSH，TLS
Security mode	User name and password authentication, 802.1x，HTTPS digital certificate
Stream encryption	Stream encryption using the AES256 encryption algorithm, and digital watermark
Alarm action	Alarm source: moving detection alarm, tampering detection/boolean value input value/intelligent analysis alarm Linked object: Boolean value output/SD card recording/SD card snapshot/Pre-recording
Intelligent analytics	
Behavior analysis	Fast-moving object detection, abandoned object detection, removed object detection, cross line detection, intrusion detection, area enter/exit detection, loitering detection
Exception Detections	Audio existence detection, detection of sudden sound increase or decrease, scene change detection and defocus detection
Interface	
Ethernet interface	1x RJ45 10/100 Base-T self-adaptive Ethernet port
Alarm interface	1-channel alarm input and 1-channel alarm output
Audio	1-channel audio input and 1-channel audio output
Memory card slot	1x MicroSD/SDHC/SDXC slot supporting memory card up to 128 GB
General Parameter	
Power supply	DC12V ± 25%, PoE(IEEE 802.3at)
Power consumption	Typical 3 W, maximum 15 W
Operating temperature	-30℃~60℃（IR off） -30℃~40℃（IR on）
Operating humidity	5% to 95% (non-condensing)
Surge suppression	6kV surge voltage
IP protection class	IP67
Vandal–proof class	IK10
Weight	Net weight: 1.4 kg, gross weight: 2 kg
Dimensions	Equipment: 272.4×84.1×66.0 mm; packaging: 400.0×200.0×136.0 mm

IPC6284–VRZ

4K UHD Intelligent Network IR Bullet Camera

4K Ultra HD

H.265

ROI enhanced encoding

120 dB
WDR

Highlight suppression

Intelligent detection

Audio exception detection

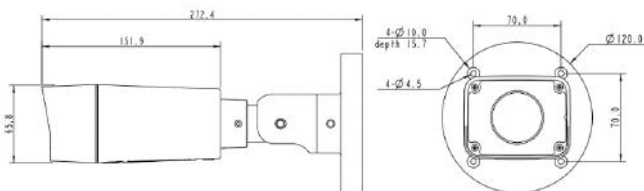Vandal-resistance

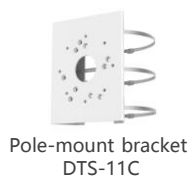Waterproof & Dustproof

PoE

Features

- Up to 4K(3840×2160) Ultra HD resolution
- A maximum of 30fps stream at 4K resolution for H.264/H.265 encoding
- Ultra WDR up to 120 dB for superb detail environments with high contrast between light and dark areas
- Highlight suppression, preserving the key information from strong headlights
- Intelligent defog, significantly improving visibility
- Intelligent behavior analytics, Face detection
- Advanced cyber-security measures, preventing against tampering, eavesdropping and virus spreading
- Ultra wide operating voltage range: ±25%
- IP67 Ruggedized Housing

Dimension

Unit：mm

Optional Accessories

Pole-mount bracket DTS-11C

Connection box ACC2501-HW

Specifications

Product model	IPC6284-VRZ
Camera	
Image sensor	1/2.5" 8MP progressive scan CMOS
Effective pixels	3840×2160
Min. Illumination	Color: 0.08lux (F1.5, AGC ON) B/W : 0.08lux (F1.5, AGC ON), 0 lux with IR on
Day and night	Automatic ICR/Color/Monochrome
Shutter time	1/3s ~1/68250s
Gain control	Auto/Manual
WDR	120dB
BLC	Supported
Highlight suppression	Supported
Image stabilization	Electronic image stabilization
Defog	Automatic/Manual
White balance	Auto/Auto-tracking/Manual/One-off calibration
Digital noise reduction	2D/3D DNR
IR coverage	30m
Lens	
Focal length	3.7-12.8mm, horizontal field of view: 88°(Wide) ~ 28°(Tele)
Aperture	F1.5 to F3.3
Auto-Iris	P-iris
Function	
Video compression	H.265 / H.264 / H.264 Smart Codec / MJPEG
Frame rate	60Hz : 30/20 to 1fps ; 50Hz : 25/20 to 1fps
Video bit rate	32Kbps to 16Mbps
Multiple streaming	Three streams
Audio compression	G.711a/G.711u/G.726/OPUS
Stream transmission	Treble streams, super error concealment, traffic shaping
System integration	ONVIF Profile S/G, Genetec Protocol v1.00, HUAWEI SDK
Network protocol	TCP , UDP , IPv4 , IPv6 , DHCP , DHCPv6 , DNS , DNSv6 , ICMP , ICMPv6 , IGMP , HTTP , HTTPS , FTP , SFTP , RTP , RTSP , RTCP , SIP , ARP , SSL , NTP , SNMP (V1/V2/V3) , 802.1x , QoS , DDNS , SMTP
Advanced cyber-security	PKI-CA, SSL/UDPS VPN tunnel encryption, VPN tunnel access isolation (These features requires support from Huawei network security solutions.)
Basic cyber-security	User 3-level authentication, 802.1x authentication, and EAP-TLS, HTTPS digital certificate, IP address filtering
Media security	AES256 encryption algorithm, and Digital Watermark
Intelligent analytics	Fast-moving object detection, Crossing line detection, abandoned/removed object detection, loitering detection, intrusion detection, face detection, color recognition, vehicle and pedestrian classification
Intelligent detections	Face detection, motion detection, tampering detection, exception audio detection, audio loss detection
Alarm actions	External alarm output, SD card recording, snapshot and pre-recording
Interface	
Ethernet interface	1x 10M/100M RJ-45 Ethernet interface
Alarm interface	1-channel alarm input and 1-channel alarm output
Audio interface	1-channel audio input and 1-channel audio port
Memory interface	1x MicroSD slot supporting memory card up to 128 GB
General	
Power supply	DC12V±25%, PoE(IEEE 802.3at)
Power consumption	Typ.4.8W , Max.15.6W
Operating temperature	–40 to 60°C
Operating humidity	5% to 95% (non-condensing)
Railway application	EN 50121-4 and EN 50125-3
Surge suppression	6kV surge voltage , complying with IEC 61000-4-5
IP protection class	IP67, complying with IEC 60529
Vandal–proof Class	IK10 vandal–proof metal casing, complying with IEC 62262
Anti-corrosion	Satisfies 10 days salt spray test, complying with IEC60068-2-11
Net weight	1.50 kg
Gross weight	2.00 kg
Physical dimensions	272.4×84.1×66.0 mm
Packing dimensions	400.0×200.0×136.00 mm

IPC6355-VRZ

5MP Network IR Dome Camera

H.265 | 120 dB WDR | Highlight suppression | Defog

Intelligent analysis | AES encryption | Scene switch | Wide voltage range
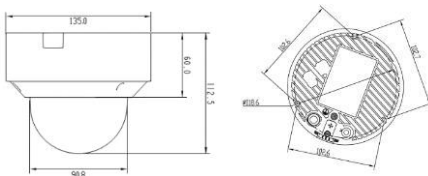
Features

- 1/2.7" 5.0 megapixel progressive scan CMOS
- A maximum of 30fps stream at 5.0 megapixel with H.265 real-time encoding
- H.265, H.264 and MJPEG video compression standard
- Wide dynamic range up to 120dB
- Defogging
- Built-in motorized zoom and focus lens
- Max. 50 meters IR coverage
- Super error concealment (SEC)
- Streams encrypted through AES
- Intelligent IR control
- Ultra wide operating voltage range, ultra wide operating temperature range
- PoE and DC power supplies

Dimension

Unit : mm

Optional Accessories

DTS-08C

DTS-09C

Specifications

Model Item	IPC6355-VRZ
Camera	
Image sensor	1/2.7" 5.0 megapixel progressive scan CMOS
Effective pixels	2560(H)×1920(V)
Min. Illumination	Color: 0.005lux (F1.2, AGC ON) B/W : 0.001lux (F1.2, AGC ON), 0 lux with IR on
Day/Night mode	Automatic ICR/Color/Monochrome
White balance	Auto/Auto-track/Manual
Wide Dynamic Range	120dB
Highlight suppression	Supported
Defog	Automatic / Manual
Digital noise reduction	Self-adaptive to 2D or 3D DNR
Lens	
Focal Length(Zoom Ratio)	2.8-12 mm
Infrared radiation distance	50 m
Function	
Video compression	H.265 / H.264 / H.264 Smart Codec / MJPEG
Max. resolution	2560(H)×1920(V)
Frame rate	60Hz:30fps(2560×1920，2560×1440，2048×1536、1920×1080) 50Hz:25fps(2560×1920，2560×1440，2048×1536、1920×1080)
Multiple streaming	Three streams
PU access protocol	ONVIF Profile S/G/T, GB/T 28181 and HUAWEI SDK
Network protocol	TCP, UDP, IPv4, IPv6,DHCP, DNS, ICMP, IGMP, HTTP, HTTPS, SFTP, RTP, RTSP, RTCP, SIP, ARP, SSL, NTP, SNMP(V1/V2/V3), 802.1x, QoS, DDNS,SSH,TLS
Security mode	User name and password authentication, 802.1x , HTTPS digital certificate
Stream encryption	AES256 encryption algorithm, and Digital Watermark
Alarm action	Alarm source: moving detection alarm, tampering detection/boolean value input value/intelligent analysis alarm Linked object: Boolean value output/SD card recording/SD card snapshot/Pre-recording
Intelligent Analytics	
Behavior analysis	Fast-moving object detection, abandoned object detection, removed object detection, cross line detection, intrusion detection, area enter/exit detection, loitering detection, head counting
Exception Detections	Audio existence detection, detection of sudden sound increase or decrease, scene change detection and defocus detection
Interface	
Ethernet interface	1x RJ-45 10/100Base-T self-adaptive Ethernet port
Alarm interface	1-channel alarm input and 1-channel alarm output
Audio interface	1-channel audio input and 1-channel audio output
Memory card slot	1x MicroSD/SDHC/SDXC slot supporting memory card up to 128 GB
General Parameter	
Power supply	DC12V ± 25%, PoE(IEEE 802.3at)
Operating temperature	-30℃~60℃（IR off），-30℃~40℃（IR on）
Operating humidity	5% to 95% (non-condensing)
Lightning surge suppression	4kV surge voltage
IP protection class	IP67
Vandal-proof Class	IK10
Weight	Net weight: 1.1 kg, gross weight: 1.4 kg
Dimensions	Equipment: φ135*112.5 mm; packaging: 260.0×195.0×148.0 mm

C6620-Z33

2MP Starlight Infrared PTZ Dome Camera

Features

- 1/2.7" 2-megapixel CMOS
- Support for intrusion detection, heat map, parking detection, and other detections
- Support for automatic tracking
- Support for video quality diagnosis
- Stream smoothing, meeting various requirements for video quality and fluency
- Traffic shaping, enabling precise control over instantaneous burst of video streams and delivering smooth video without packet loss
- TCP acceleration, enabling the network to carry video streams of higher quality

Specifications

Product Model	C6620-Z33
Camera	
Image sensor	1/2.7" 2-megapixel CMOS
Effective pixels	1920 x 1080
Minimum 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)
Day/Night mode	Automatic ICR, color, or B/W
Shutter speed	1/68250s to 1/3s
Gain control	Auto/Manual
Wide dynamic range (WDR)	120 dB
Backlight compensation (BLC)	Supported (BLC area is selectable)
White balance	Manual/Automatic/Automatic tracking
Highlight Compensation (HLC)	Supported
Image defogging	Auto/Manual
Electronic image stabilization	Supported
Lens	
Focal length	5–165 mm
Maximum aperture	F1.6
Iris type	P-Iris
Effective radiation distance	150 m
PTZ	
Rotation angle	Pan: 0° to 360°; Tilt: −15° to +90°
Pan speed	Manual: 0.1–160°/s; Preset position: 400°/s
Tilt speed	Manual: 0.1–120°/s; Preset position: 400°/s
Function	
Video compression format	H.265 / H.264 / H.264 Smart Codec / MJPEG
Maximum resolution	1920 x 1080
Multiple streams	Triple streams
Intelligent encoding	Extra265/264
Audio encoding format	G.711a/G.711u/G.726/OPUS
Voice communication	Voice intercom and broadcast, channel-associated voice
Camera connection protocol	ONVIF Profile S/G/T, GB/T 28181 (2011, 2016), GB 35114-2017, HUAWEI SDK, and HUAWEI Rest API
Network protocol	TCP, UDP, IPv4, IPv6, DHCP, DHCPv6, DNS, ICMP, ICMPv6, IGMP, HTTPS, FTP, SFTP, RTP, RTSP, RTCP, SIP, ARP, SSL, NTP, SNMP (V1/V2/V3), 802.1X, QoS, and DDNS
Security mode	User name and password authentication, 802.1X, and HTTPS-based secure access
Media security	KMC key encryption, AES256-based stream encryption, and digital watermark
Alarm linkage	Boolean value, preset position, tour track, scan, SD card–based video recording and snapshot taking, email, and pre-alarm pre-recording
Intelligent Function	
Behavior analysis	Fast movement detection, abandoned object detection, removed object detection, tripwire crossing detection, intrusion detection, area entry/exit detection, and loitering detection.
Exception detection	Video quality diagnosis, audio existence detection, sudden volume increase or decrease detection, scene change detection, and defocus detection
Intelligent tracking	Auto tracking
Intelligent detection	Heat map and parking detection
Port	
RJ-45 port	One RJ-45 10M/100M adaptive Ethernet port
Alarm port	2 alarm input ports and 1 alarm output port
Audio port	1 audio input port and 1 audio output port
Storage port	MicroSD card slot that supports microSDHC/microSDXC; maximum memory card capacity: 256 GB
General Specifications	
Power supply	24 V AC; PoE+ (IEEE802.3at)
Operating environment	−30°C to +60°C, 5% ~95% (non-condensing)
Ingress protection rating	IP66
Surge protection level	6 kV
Impact protection rating	IK10 (except the window)
Dimensions (H x W x D)	Device (Φ x H): 202 mm x 309 mm; Packing (H x W x D): 460 mm x 295 mm x 295 mm