iDS-TCM803-HIR
8Mp IR Radar-Video ANPR Smart Monitoring





- High quality imaging with 8 MP resolution(1/1.8'' CMOS)
- Clear imaging against strong back light due to 140 dB WDR technology
- Built-in ANPR engine, equipped with AI algorithm
- Efficient H.265 compression technology
- Water and dust resistant (IP68) and vandal proof (IK10)
- Dedicated large scale AI model for vehicle type / color / make

▪ Specification

Camera	
Image Sensor	1/1.8" progressive scan CMOS
Max. Resolution	3840 ×2160
Min. Illumination	Color: 0.0005 Lux @ (F1.2, AGC ON),B/W: 0.0001 Lux @ (F1.2, AGC ON), 0 Lux with IR
Shutter Time	7/100000s to 1/25s
Day & Night	IR cut filter
Lens	
Focal Length & FOV	8-32mm: Horizontal: 41.9° to 15.1°°, Vertical: 22.9° to 8.64°, Diagonal: 48.8° to 17.3°
Focus	Auto
Iris Type	DC-IRIS
Aperture	8-32mm : F1.7
Illuminator	
Built-in Supplement Light Type	IR light
Supplement Light Number	3
Built-in Supplement Light Range	Up to 50 m
IR Wavelength	850 nm
Radar	
Working Frequency	77 GHz
Modulation Waveform	FMCW
Detection Distance	Up to 100m
Speed Measuring Range	Up to 120Km/h
Horizontal Detection Angle	± 22°
Vertical Detection Angle	± 10°
Coverage Lanes	Up to 4 lane(s)
Video	
Main Stream	50 Hz: 25 fps (3840 × 2160, 3392 × 2008, 3072 × 1728, 2688 × 1520, 1920 × 1200, 1920 × 1080P, 1280 × 720P) 60 Hz: 30 fps (3840 × 2160, 3392 × 2008, 3072 × 1728, 2688 × 1520, 1920 × 1200, 1920 × 1080P, 1280 × 720P)
Sub-Stream	50Hz: 25 fps (3072 × 1728, 2688 × 1520, 1920 × 1200, 1920 × 1080P, 1280 × 720P, 704 × 576) 60 Hz: 30 fps (3072 × 1728, 2688 × 1520, 1920 × 1200, 1920 × 1080P, 1280 × 720P, 704 × 576)
Third Stream	50 Hz: 25 fps (1280 × 720P, 704 × 576, 352 × 288) 60 Hz: 30 fps (1280 × 720P, 704 × 576, 352 × 288)
Video Compression	H.264 and H.265 encoding Main stream: H.265/H.264/MJPEG Sub-stream: H.265/H.264/MJPEG Third-stream: H.265/H.264/MJPEG

Video Bit Rate	32 Kbps to 16 Mbps
H.264 Type	Baseline profile/Main profile/High profile
H.265 Type	Main profile
Audio	
Audio Compression	G.711/G.722.1
Audio Bit Rate	8Kbps (G.711) /16Kbps (G.722.1)
Network	
Protocols	TCP/IP,ICMP,HTTP,HTTPS,FTP,SFTP,DHCP,DNS,DDNS,RTP,RTSP,RTCP,NTP,SMTP,SNMP,IGMP,QoS,IPv4/IPv6,UDP,SSL/TLS,ISUP,ARP,802.1X
Simultaneous Live View	Up to 6 channels
API	ISAPI,SDK,ISUP,ONVIF (PROFILE S, PROFILE G, PROFILE T, PROFILE M)
User/Host	Up to 32 users 3 user levels: administrator, operator, and user
Security	Password protection,Complicated password,HTTPS encryption,802.1X authentication (EAP-PEAP, EAP-LEAP, EAP-MD5),Watermark,IP address filter,Basic and digest authentication for HTTP/HTTPS,WSSE and digest authentication for ONVIF,RTP/RTSP over HTTPS,Control timeout settings,Security audit log,TLS 1.2, 1.3,Host authentication (MAC address)
Network Storage	Micro SD/TF card (1 TB), local storage and CVR, NVR, ANR
Client	Hik-Central Master,Hik-Central Pro,HikCentral Master Lite
Web Browser	Chrome V61+, IE9 to IE11, Firefox V41+, Edge
Image	
Image Settings	Saturation,Brightness,Contrast,Gain,Sharpness,White balance,AGC,Adjustable by client software or web browser.
Day/Night Switch	Auto/Scheduled/Manual
Wide Dynamic Range (WDR)	140 dB
Image Enhancement	BLC, 3D DNR
Interface	
Ethernet Interface	1 RJ45 10M/100M/1000M Ethernet interface
On-Board Storage	Built-in memory card slot, supporting microSD/SDHC/SDXC card, up to 1 TB
Audio	Supported
Alarm	1 input interface, 1 output interface, 2 relays
RS-485	1 RS-485 interface
Wiegand	1 Wiegand (CardID 26bit, SHA-1 26bit, Hik 34bit)
Event	
Basic Event	HDD Error, Network Disconnected, IP Address Conflicted
Road Traffic and Vehicle Detection	
Coverage	Up to 4 lane(s)
Smart Function	license plate recognition of vehicles, Helmet Detection, Manned Non-Motor Detection, Enclosed Area Speeding, Traffic flow detection: average speed, traffic flow, queuing length, and traffic status, Incident detection: congestion, stopped vehicle, lane change, wrong-way driving, speeding, low-speed driving,

LPR Countries/Regions	120+ countries/regions: Middle East: The United Arab Emirates (Abu Dhabi, Ajman, Dubai, Fujairah, Ras Al Khaimah, Sharjah and Umm Al Quwain), Qatar, Iraq, Egypt, Jordan, Kuwait, Saudi Arabia, Pakistan, Oman, Lebanon, Bahrain, Africa: Nigeria, Kenya, Ivory Coast , South Africa, Tanzania, Mauritius, Morocco, Tunisia, Sierra Leone, Zambia, Ghana, Zimbabwe, Uganda, Angola, Ethiopia, Senegal, Algeria, Asia-Pacific: Australia, New Zealand, Indonesia, Malaysia, Singapore, South Korea, Thailand, Vietnam, the Philippines, Hong Kong, Macao, Taiwan, Myanmar, India, Mongolia, Cambodia, Laos, Bangladesh, Nepal, Sri Lanka, America: Canada, Argentina, Chile, Paraguay, Uruguay, El Salvador, Bolivia, Colombia, Brazil, Ecuador, Peru, Mexico, Panama, Costa Rica, Trinidad and Tobago, the Dominican Republic, Guatemala, Europe: Turkey, Croatia, Slovakia, Czech Republic, Bulgaria, the Republic of North Macedonia, Hungary, Greece, Poland, France, Netherlands, Switzerland, Spain, the UK, Ireland, Germany, Italy, Austria, Israel, Palestinian, Belgium, Luxembourg, Albania, Kosovo, Serbia, Romania, Montenegro, Denmark, Finland, Sweden, Slovenia, Portugal, Malta, Cyprus, Iceland, Liechtenstein, Bosnia and Herzegovina, Russian-Speaking Regions: Azerbaijan, Belarus, Kazakhstan, Lithuania, Georgia, Estonia, Latvia, Russia, Ukraine, Moldova, Uzbekistan, Kyrgyzstan, Armenia, Turkmenistan, Tajikistan
Accuracy (Under recommended installation and lighting conditions)	Capture rate > 99%, Vehicle moving direction recognition accuracy > 98.5%, LPR accuracy > 98%, Mistaken capture rate < 2%
No License Plate Detection	Supported
ADR License Plate	Supported
Motorcycle LPR	Supported
Vehicle Type	Car,Van,Bus,Truck,Light Truck,SUV(MPV),Pickup,Motorcycle,Tricycle
Vehicle Color	Red, yellow, green, blue, pink, purple, cyan, brown, white, grey, black Recognizable at daytime only.

Vehicle Manufacturer	212 Manufacturers: AC SCHNITZER, AITO, APOLLO, Ashok Leyland, Audi, Aston Martin, Acura, Ankai, Ayvip, Alfa Romeo, Asiastar, Artega, ARCFOX, BAIC, Beiben Truck, BLUECAR, Bedford, Benz, BMW, BYD , Bufori, Buick, Bently, Brabus, Bugatti, Borgward, BONLUCK, Besturn, CADILLAC, Celis, Chevrolet, Citroen, Chery, Chrysler, Chang an, CNHTC, CHTC, Caterham, Conquest, C&C Trucks, CAMC, DAIHATSU, DMC, DS, Dacia, Dongnan, Dodge, Dongwo, Denza, Dongfeng, Daewoo, Dima, Denway, DORCEN, Eicher, Emgrand, Equss, EXEED, Ford, FORO, Fornasari, Ferrari, Fuqi, Fiat, Fisker, FQT Motor, Foton, FAW, FORLAND, FUSO, Force Motors, Fxauto, Faralli Mazzanti, GAC, Great Wall, GMC, Geely, Geometry, Hyundai, HENNESSEY, HINO, Honda, Haima, Haval, Hongqi, Isuzu, Infiniti, Iveco, IAT, IM, JAC, JBC, JEEP, Jaguar, JMC, JETOUR, JETTA, Joylong ,Koenigsegg, KIA , Kia-Borrego, King Long, Kama, KTM, LEVC, Lexus, Land Rover, Lincoln, Lamborghini, Lotus, Luxgen, Levdeo, Leopaard, Lynk & Co , Lada, Leading Ideal, LEAPMOTOR, LUMMA, Lorinser, Land Wind, MAN Trucks , MAXUS, MG, MINI, Mahindra, Mitsuoka, Maserati, Meiya , McLaren, Maybach, Mazda, Morgan, Mitsubishi, Mustang, Marvel R, Maple, MANSORY, Modern, NOMA, Nissan, Norinco, Neoplan, NIO, NETA, Opel, Ora, Oushang, Perodua, Porsche, Peugeot, PGO, Proton, Pagani, Polestar, POCCO, Qoros, RAM, Rolls-Royce, Renault, Roewe, Rohens, Ranz, Ruilan, Radar, Renault Samsung, SAAB, SCANIA , SCION, SMART, SML ISUZU, Suzuki, SAIC Datong, Subaru, Skoda, Startek, Soyat, Seat , SWM, Sany, SsangYong, Sojen, Silver, SATE, SOL, Skyworth, SGMW, SITECH DEV, TATA, Tankar, Tesla, Trumpchi, Techart, Toyota, UD, UAES, Volkswagen, VINFAST, Venucia, Volvo, VOYAH, VeiculoLongo, Weltmeister , XCMG, Xinyuan, XPENG, Yutong, YAMAHA, Zhonghua, Zotye, Zhinuo, ZEEKR, Zenvo
Capture Speed Range	5 to 120 km/h
Blocklist and Allowlist	Max. 50000 records
General	
Operating System	Linux
Power	DC 12 V to 24 V, 2.25 A, max. 27 W, two-core terminal block, PoE: 802.3bt, Type 2, Class 4, max. 27 W
Material	Aluminum alloy
Dimension	414 mm × 120 mm × 194.7 mm (16.3" × 4.7" × 7.7") (L × W × H)
Package Dimension	595 mm × 259 mm × 193 mm (23.4" × 10.2" × 7.6") (L × W × H)
Weight	Approx. 2.975 kg (6.56 lb.)
With Package Weight	Approx. 4.385 kg (9.67 lb.)
Operating Condition	-30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)
Storage Condition	-30 °C to 70 °C (-22 °F to 158 °F). Humidity 95% or less (non-condensing)
General Function	One-key reset, three streams, heartbeat, password protection, watermark
Language	8 languages: English, Thai, Croatian, Korean, Russian, Traditional Chinese, Ukrainian, Spanish
Approval	
RF	CE-RED: EN 301489-1 V2.2.3,EN 301489-51 V2.1.1,EN 301091-2 V2.1.1,EN IEC 62311:2020
EMC	EN 55032: 2015+A11:2020+A1:2020, EN IEC 61000-3-2: 2019+A1:2021+A2:2024, EN 61000-3-3: 2013+A1:2019+A2:2021, EN 50130-4: 2011+A1: 2014

Safety	CB: IEC 62368-1:2014,CB: IEC 62368-1:2018,CE-LVD: EN 62368-1:2014+A11:2017,CE-LVD: EN IEC 62368-1:2020+A11:2020
Environment	CE-RoHS: 2011/65/EU,WEEE: 2012/19/EU,Reach: Regulation (EC) No 1907/2006
Protection	IK10:IEC 62262:2002,IP68:IEC 60529-2013

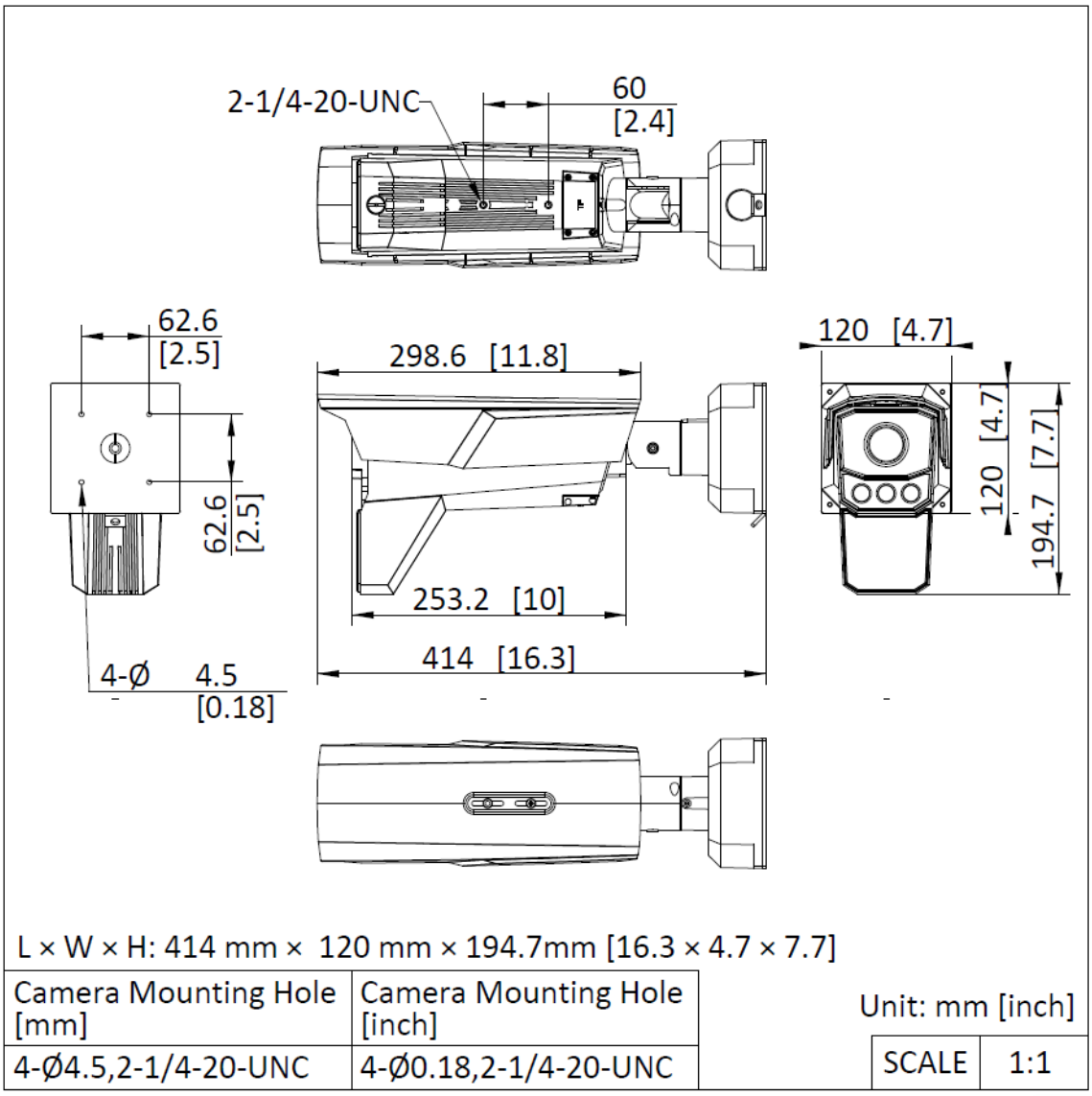
▪ Typical Application

Hikvision products are classified into three levels according to their anti-corrosion performance. Refer to the following description to choose for your using environment.

This model has NO SPECIFIC PROTECTION.

Level	Description
Top-level protection	Hikvision products at this level are equipped for use in areas where professional anti-corrosion protection is a must. Typical application scenarios include coastlines, docks, chemical plants, and more.
Moderate protection	Hikvision products at this level are equipped for use in areas with moderate anti-corrosion demands. Typical application scenarios include coastal areas about 2 kilometers (1.24 miles) away from coastlines, as well as areas affected by acid rain.
No specific protection	Hikvision products at this level are equipped for use in areas where no specific anti-corrosion protection is needed.

▪ Dimension



L × W × H: 414 mm × 120 mm × 194.7mm [16.3 × 4.7 × 7.7]

Camera Mounting Hole [mm]	Camera Mounting Hole [inch]
4-Ø4.5,2-1/4-20-UNC	4-Ø0.18,2-1/4-20-UNC

Unit: mm [inch]

SCALE	1:1

▪ Accessory

▪ Optional

DS-1275ZJ-BJH/60 0mm	DS-1232ZJ-T/BJH	DS-1278ZJ-BJH	DS-1275ZJ-BJH/12 7mm	DS-1701ZJ/BJH
				

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