

iDS-TCVK00-HI/H1 20 MP IR ANPR Checkpoint Capture Unit



- High quality imaging with 20 MP resolution (1.1" GMOS)
- Excellent low-light performance, color: 0.007 Lux @ (F1.4, AGC ON)
- Efficient H.265 compression technology
- 3D DNR technology delivers clean and sharp images
- Support license plate recognition (LPR)
- Vehicle feature recognition: vehicle type/color/manufacturer/license plate color recognition, no-plate vehicle capture
- Violation behaviors detection: driving on lane line, lane change, wrong-way driving detection, seatbelt and phone call detection
- Application Scenarios: highway, tunnel, toll station, urban road, etc.

▪ Specification

Camera	
Image Sensor	20 MP (1.1" GMOS)
Max. Resolution	6112 × 3488
Min. Illumination	Color: 0.007 Lux @ (F1.4, AGC ON), B/W: 0 Lux with IR, B/W: 0.005 Lux @ (F1.4, AGC ON)
Shutter Time	25 fps 10 us-40000 us, 30 fps 10 us-33333 us
Day & Night	IR cut filter
Lens	
Focal Length & FOV	11 to 40 mm, horizontal FOV 55.9° to 21.2°, vertical FOV 43.6° to 16.5°, diagonal FOV 71.2° to 27.2°
Focus	Auto
Aperture	F1.6
Illuminator	
Built-in Supplement Light Type	IR light
Light Bead	3
Built-in Supplement Light Range	Up to 30 m
IR Wavelength	850 nm
External Supplement Light	Strobe and flash light
Video	
Main Stream	50 Hz: 25 fps (6112 × 3488, 4096 × 2160, 3296 × 2472, 3392 × 2008, 2560 × 1920, 2048 × 1536, 1920 × 1080, 1280 × 720) 60 Hz: 30 fps (6112 × 3488, 4096 × 2160, 3296 × 2472, 3392 × 2008, 2560 × 1920, 2048 × 1536, 1920 × 1080, 1280 × 720)
Sub-Stream	50 Hz: 50 fps (3392 × 2008, 2688 × 1520, 1920 × 1080, 1280 × 720, 704 × 576) 60 Hz: 30 fps (3392 × 2008, 2688 × 1520, 1920 × 1080, 1280 × 720, 704 × 576)
Third Stream	50 Hz: 50 fps (1920 × 1080, 1280 × 720, 704 × 576) 60 Hz: 30 fps (1920 × 1080, 1280 × 720, 704 × 576)
Video Compression	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
Network	
Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, DNS, RTP, RTSP, RTCP, NTP, SNMP, 802.1X, IPv4/IPv6, UDP, ISUP, ARP, IGMP
Simultaneous Live View	Up to 10 channels
API	ISAPI, SDK, ISUP, ONVIF (PROFILE S, PROFILE G, PROFILE T, PROFILE M), OTAP
User/Host	Up to 32 users 3 user levels: administrator, operator, and user
Security	Password protection, Complicated password, HTTPS encryption, Control timeout settings, 802.1X authentication (EAP-PEAP, EAP-LEAP, EAP-MD5), Basic and digest authentication for HTTP/HTTPS, WSSE and digest authentication for Open Network Video Interface
Network Storage	Micro SD/TF card (512 GB), Local storage, 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, sharpness, AGC, and white balance are adjustable by client software or web browser.
Day/Night Switch	Auto, Schedule, Manual
SNR	60 dB
Image Enhancement	BLC, HLC, 3D DNR
Interface	
Ethernet Interface	2 RJ45 10 M/100 M/1000 M self-adaptive Ethernet port(s)
On-Board Storage	Built-in memory card slot, supporting microSD/SDHC/SDXC card, up to up to 512 GB
Alarm	2 input interfaces (T1, SYNC), 7 output interfaces
RS-485	3 RS-485 interfaces (half duplex, HIKVISION)
RS-232	1 RS-232 interface
USB	1 USB 2.0 interface
Event	
Basic Event	HDD error, Network disconnected, IP address conflict, Traffic light detector exception
Road Traffic and Vehicle Detection	
Coverage	Up to 4 lane(s)
Smart Function	License plate recognition, Vehicle type classification, Vehicle color recognition, No-plate vehicle capture, Moving direction detection
LPR 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
Trigger Mode	External I/O trigger/Radar trigger/Video trigger
Vehicle Type	Car/Van/Bus/Truck/Light Truck/SUV_MPV/Pickup/Pedestrian/Motorcycle/Tricycle

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
Motorcycle LPR	Supported
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, Equus, 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, Zhihuo, ZEEKR, Zenvo
License Plate Color Recognition	Customized
U-Turn	Supported (only E-Police mode)
Red Light Running	Supported (only E-Police mode)
Failing to Yield for Pedestrians	Supported (only E-Police mode)
Stop Vehicle on Intersection	Supported (only E-Police mode)
Not Following Directional Sign	Supported (only E-Police mode)
Yellow Box Junction Violation	Supported (only E-Police mode)
Driving on Lane Line Detection	Supported
Lane Change Detection	Supported
Phone Call Detection	Supported (with flash supplement light)
Seatbelt Detection	Supported (with flash supplement light)
Vehicle Window Film	Supported (with flash supplement light)
Wrong-Way Driving Detection	Supported
Emergency Lane Occupation	Supported (truck forbidden lane, emergency lane, urban bus lane)
Prohibition Mark Violation	Supported

Speeding	Supported (with Radar)
Low-Speed	Supported (with Radar)
Without Helmet	Supported
Manned Non-Motor Vehicle	Supported
Capture Speed Range	10 to 320 km/h
General	
Operating System	Linux
Power	AC 100 V to 240 V, 1.5 A, max. 35 W, 3-core terminal block
Material	Aluminum alloy
Dimension	501 mm × 175.6 mm × 141.6 mm (19.72" × 6.92" × 5.69") (L × W × H)
Package Dimension	667 mm × 357 mm × 224 mm (26.26" × 14.06" × 8.82") (L × W × H)
Weight	Approx. 5.13x kg (11.31x lb.)
With Package Weight	Approx. 7.4x kg (16.31x lb.)
Operating Condition	-40 °C to 70 °C (-40 °F to 158°F). Humidity: 5% to 95% (non-condensing)
Storage Condition	-30 °C to 60 °C (-22 °F to 140 °F). Humidity: 5% to 95% (non-condensing)
General Function	Password protection, Three streams, Heartbeat, Pixel counter
Heater	Supported
Language	7 languages: English, Russian, Croatian, Korean, Spanish, Traditional Chinese, Ukrainian
Approval	
EMC	CE-EMC: EN 55032: 2015/A11:2020+A1:2020, EN IEC61000-3-2: 2019/A1:2021, EN 61000-3-3: 2013+A1:2019/A2:2021, EN 50130-4: 2011 +A1: 2014
Safety	CE-LVD: EN 62368-1: 2014/A11: 2017, CB: IEC 62368-1: 2014+A11, CB: IEC 62368-1: 2018+A11
Environment	CE-RoHS: 2011/65/EU, WEEE: 2012/19/EU, Reach: Regulation (EC) No 1907/2006
Protection	IK10: IEC 62262:2002, IP66: IEC 60529-2013

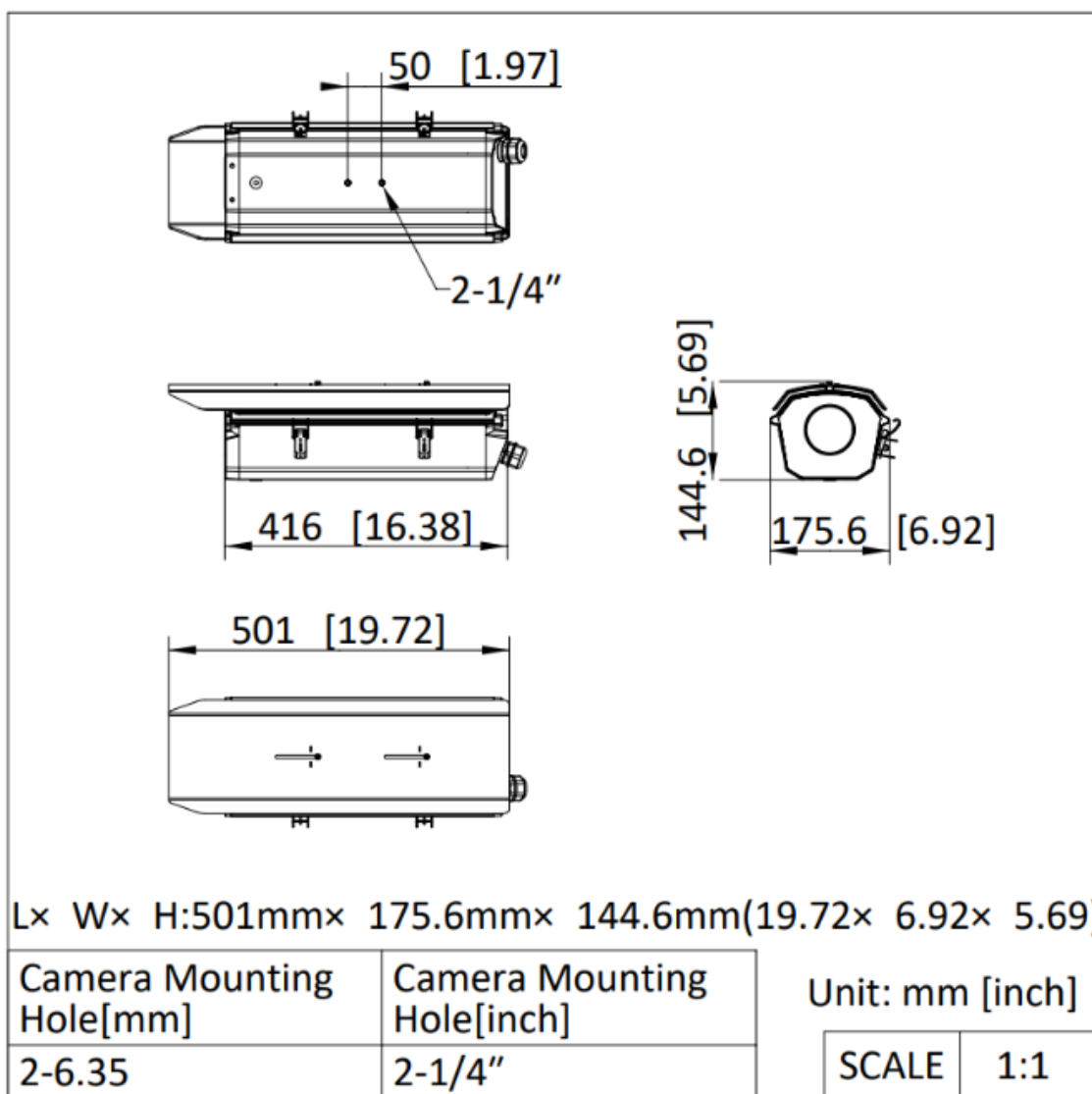
▪ Typical Application

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



▪ Accessory

▪ Included

DS-1232ZJ-T/BJH



▪ Optional

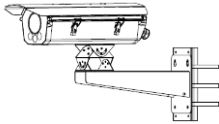
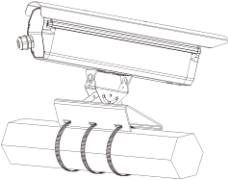
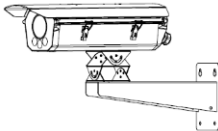
DS-1275ZJ/HWB

DS-1278ZJ-HWB

DS-1701ZJ/HWB



▪ **Installation Methods**

Vertical Pole Mounting DS-1275ZJ/HWB+DS-1701ZJ/HWB	Horizontal Pole Mounting DS-1278ZJ-HWB	Wall Mounting DS-1701ZJ/HWB
		

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