

## iDS-TCV500-HI/H1 5 MP IR ANPR Checkpoint Capture Unit



- High quality imaging with 5 MP resolution (2/3" GMOS)
- Excellent low-light performance, Color: 0.001 Lux@(F1.4, AGC ON), B/W: 0.0005 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, phone call, U-Turn, red light running, failing to yield for pedestrians, not following directional sign and stop vehicle on intersection detection.
- Application Scenarios: highway, tunnel, toll station, urban road, etc.

## ▪ Specification

Camera	
Image Sensor	5 MP (2/3" GMOS)
Max. Resolution	2464 × 2056
Min. Illumination	Color: 0.001 Lux @ (F1.4, AGC ON), B/W: 0.0005 Lux @ (F1.4, AGC ON), 0 Lux with IR
Shutter Time	8 us-20000 us
Day & Night	IR cut filter
Lens	
Lens Type	Varifocal lens, motorized lens, 11 to 40 mm
Focal Length & FOV	11 to 40 mm, horizontal FOV 36.8° to 13.9°, vertical FOV 30.7° to 11.6°, diagonal FOV 48.0° to 18.1°
Focus	Auto
Aperture	F1.6
Illuminator	
Built-in Supplement Light Type	IR light
Built-in Supplement Light Range	Up to 30 m
Light Bead	3
IR Wavelength	850 nm
External Supplement Light	Strobe and Flash light
Video	
Main Stream	50 Hz: 50 fps (2448 × 2048, 2464 × 2056, 2048 × 1536, 1920 × 1080, 704 × 576) 60 Hz: 30 fps (2448 × 2048, 2464 × 2056, 2048 × 1536, 1920 × 1080, 704 × 576)
Sub Stream	50 Hz: 50 fps (2448 × 2048, 2048 × 1536, 1920 × 1080P, 704 × 576) 60 Hz: 30 fps (2448 × 2048, 2048 × 1536, 1920 × 1080P, 704 × 576)
Third Stream	50 Hz: 50 fps (2048 × 1536, 1920 × 1080, 704 × 576) 60 Hz: 30 fps (2048 × 1536, 1920 × 1080, 704 × 576)
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
Network	
Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, DNS, RTP, RTSP, RTCP, NTP, SNMP, 802.1X, IPv4/IPv6, UDP, ISUP, ARP, IGMP, SMTP
Simultaneous Live View	Up to 6 channels
API	ISAPI, SDK, ISUP, ONVIF (PROFILE S, PROFILE G, PROFILE T, PROFILE M)
User/Host	Up to 16 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	MicroSD/TF card (512 GB), local storage and CVR, NVR, ANR
Client	Hik-Central Master, Hik-Central Pro, HikCentral Master Lite
Web Browser	Chrome V61+, IE9 to IE11, Firefox V40+, Edge
<b>Image</b>	
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, 3D DNR
<b>Interface</b>	
Ethernet Interface	2 RJ45 10 M/100 M/1000 M self-adaptive Ethernet interfaces
On-Board Storage	Built-in memory card slot, supporting microSD/SDHC/SDXC card, 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
<b>Event</b>	
Basic Event	HDD Error, Network disconnected, IP address conflicted, Traffic light detector exception
<b>Road Traffic and Vehicle Detection</b>	
Coverage	Up to 2 lane(s)
Trigger Mode	External I/O trigger/Radar trigger/Video trigger
Smart Function	License plate recognition, Vehicle type classification, color identification, no-plate vehicle capture, moving direction detection
LPR Countries/Regions	<p>Mid-East: United Arab Emirates (Abu Dhabi, Fuchaiha, Dubai, Cape Haima, Ozhman, Sharjah, Umgavan), Qatar, Iraq, Egypt, Jordan, Kuwait, Saudi Arabia, Pakistan, Oman, Lebanon, Bahrain</p> <p>Africa: Nigeria, Kenya, Cote d'Ivoire, South Africa, Tanzania, Mauritius, Morocco, Tunisia, Sierra Leone, Zambia, Ghana, Zimbabwe, Uganda, Angola, Ethiopia, Senegal, Algeria</p> <p>Asia-Pacific: Australia, New Zealand, Indonesia, Malaysia, Singapore, South Korea, Thailand, Vietnam, Philippines, Hong Kong, Macao, Taiwan, Burma, India, Mongolia, Cambodia, Laos, Bangladesh</p> <p>America: United States of America, Canada, Argentina, Chile, Paraguay, Uruguay, El Salvador, Bolivia, Colombia, Brazil, Ecuador, Peru, Mexico, Panama, Costa Rica, Trinidad and Tobago, Dominican, Guatemala</p> <p>Europe: Turkey, Croatia, Slovakia, Czech Republic, Bulgaria, Macedonia, Hungary, Greece, Poland, France, Netherlands, Switzerland, Spain, Britain, Ireland, Germany, Italy, Austria, Israel, Palestine, Belgium, Luxembourg, Albania, Kosovo</p> <p>Russian-Speaking Regions: Azerbaijan, Belarus, Kazakhstan, Lithuania, Georgia, Estonia, Latvia, Russian Federation, Ukraine, Moldova, Uzbekistan, Kyrgyzstan, Armenia</p>

No License Plate Detection	Supported
Accuracy (Under recommended installation and lighting conditions)	Capture rate > 99%, Vehicle moving direction recognition accuracy > 98.5%, LPR accuracy > 98%, Mistaken capture rate < 2%
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, Zhinuo, ZEEKR, Zenvo
Vehicle Type	Car/Van/Bus/Truck/Light Truck/SUV_MPV/Pickup/Pedestrian/Motorcycle/Tricycle
License Plate Color Recognition	Customized to support
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 (only strobe light mode)
Lane Change Detection	Supported (only strobe light mode)
Seatbelt Detection	Supported (with flash supplement light)
Phone Call 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
<b>General</b>	
Operating System	Linux
Power	iDS-TCV500-HI/1140/H1(AF)(24V): DC 24 model: DC 24 V, 2 A, max. 47 W, 3-core terminal block iDS-TCV500-HI/1140/H1(AF): AC 100 V to 240 V, 2.9 A, max. 27 W, 3-core terminal block
Material	Aluminum alloy
Package Dimension	667 mm × 357 mm × 224 mm (26.26" × 14.06" × 8.82") (L × W × H)
Dimension	501 mm × 175.6 mm × 144.6 mm (19.72" × 6.92" × 5.69") (L × W × H)
With Package Weight	Approx. 7.4 kg (16.31 lb.)
Weight	Approx. 5.13 kg (11.31 lb.)
Storage Condition	-30 °C to 70 °C (-22 °F to 158 °F). Humidity: 5% to 95% (non-condensing)
Operating Condition	-30 °C to 70 °C (-22 °F to 158 °F). Humidity: 5% to 95% (non-condensing)
General Function	Password protection,Three streams,Heartbeat,One-key reset,Pixel counter
Heater	Optional
Language	8 languages: English, Thai, Croatian, Korean, Russian, Traditional Chinese, Ukrainian, Spanish
<b>Approval</b>	
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	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,IP67: IEC 60529-2013

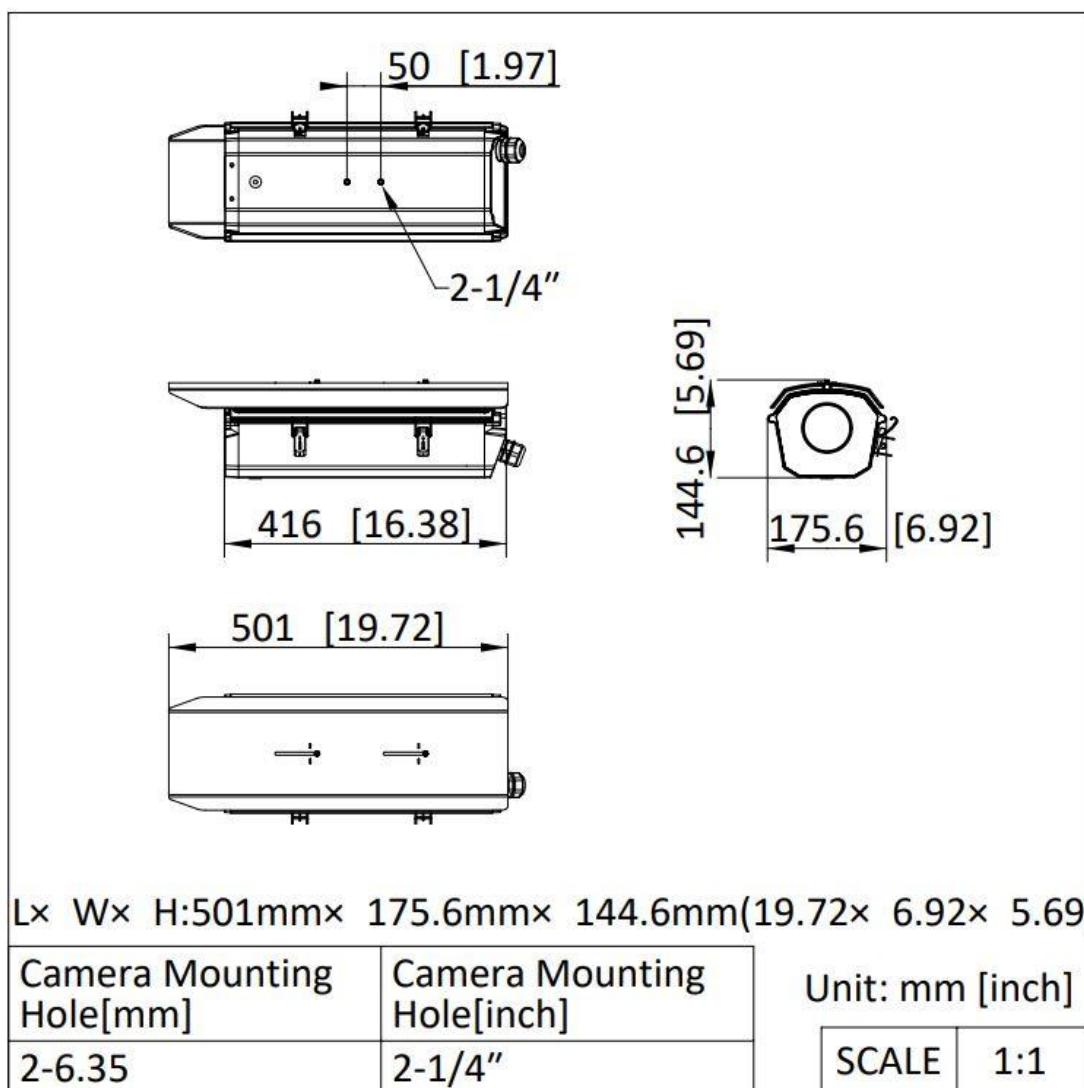
## ▪ Typical Application

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/HKB**



# See Far, Go Further



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