

## IDS-TCV500-HE 5 MP 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)
- 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), 0 Lux with white light   |
| Shutter Time                    | 8 us-20000 us   |
| Day & Night                     | 24/7 color imaging  |
| 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 18.2°  |
| Focus                           | Auto  |
| Aperture                        | F1.6  |
| Illuminator                     |   |
| Built-in Supplement Light Type  | White light   |
| Built-in Supplement Light Range | Up to 30 m  |
| Light Bead                      | 4   |
| External Supplement Light       | Strobe and flash light  |
| Video                           |   |
| Main Stream                     | 50 Hz: 50 fps (2448 × 2048, 2464 × 2056, 2048 × 1536, 1920 × 1080, 704 × 576)<br>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)<br>60 Hz: 30 fps (2448 × 2048, 2048 × 1536, 1920 × 1080P, 704 × 576)  |
| Third Stream                    | 50 Hz: 50 fps (2048 × 1536, 1920 × 1080, 704 × 576)<br>60 Hz: 30 fps (2048 × 1536, 1920 × 1080, 704 × 576)  |
| Video Compression               | Main stream: H.265/H.264/MJPEG<br>Sub-stream: H.265/H.264/MJPEG<br>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<br>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 and CVR, NVR, ANR  |
| Client                          | Hik-Central Master, Hik-Central Pro, Hik-Central Master Lite  |
| Web Browser                     | Chrome V61+, IE9 to IE11, Firefox V40+, 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, 3D DNR   |
| Interface                          |   |
| Ethernet Interface                 | 2 RJ45 10 M/100 M/1000 M self-adaptive Ethernet interfaces  |
| On-board Storage                   | Built-in memory card slot, supporting micro SD/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   |
| Event                              |   |
| Basic Event                        | HDD Error, Network disconnected, IP address conflicted, Traffic light detector exception  |
| Road Traffic and Vehicle Detection |   |
| Coverage                           | Up to 2 lane(s)   |
| Smart Function                     | License plate recognition, vehicle type classification, vehicle color recognition, no-plate vehicle capture, moving direction detection   |
| LPR Countries/Regions              | <p>Mid-East:<br/>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:<br/>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:<br/>Australia, New Zealand, Indonesia, Malaysia, Singapore, South Korea, Thailand, Vietnam, Philippines, Hong Kong, Macao, Taiwan, Burma, India, Mongolia, Cambodia, Laos, Bangladesh</p> <p>America:<br/>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:<br/>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:<br/>Azerbaijan, Belarus, Kazakhstan, Lithuania, Georgia, Estonia, Latvia, Russian Federation, Ukraine, Moldova, Uzbekistan, Kyrgyzstan, Armenia</p> |
| 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%,<br>Vehicle moving direction recognition accuracy >98.5%,<br>LPR accuracy >98%,<br>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   |
| 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 Dongwo, Subaru, Iveco, MINI, JEEP, Porsche, Chery, Dodge, Chrysler, Acura, Alfa Romeo, Great Wall, Infiniti, Smart, Saic Maxus, JAC, Jaguar, GMC, Lincoln, JMC, SAAB, FAW, Yutong, Guangzhou Yunbao, Joylong, Geely, Cadillac, JBC, An'kai, Haima, Foton, King Long, Dongfeng, Geely-Emgrand, Perodua, UD, BYD, Renault Samsung, Proton, HICOM, Malaysia_Unknown 1, Hyundai -Rohens, SsangYong-Old Version, Equus-Old Version, CNHTC, Rolls-Royce, Beiben Truck, Haval, Hino, Kia-Borrego, Chang'an, Alfa, FORO |
| 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   |
| 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   |
| <b>General</b>              |  |
| Operating System            | Linux  |
| Power                       | AC 100 V to 240 V, 1.5 A, max. 27 W, 3-core terminal block   |
| Material                    | Aluminum alloy   |
| Dimension                   | 636 mm × 174 mm × 146 mm (25.04" × 6.85" × 5.75") (L × W × H)  |
| Package Dimension           | 667 mm × 357 mm × 224 mm (26.26" × 14.06" × 8.82") (L × W × H)   |
| Weight                      | Approx. 6.11 kg (13.47 lb.)  |
| With Package Weight         | Approx. 9.92 kg (21.87 lb.)  |
| Operating Condition         | -30 °C to 70 °C (-22 °F to 158 °F). Humidity: 5% to 95% (non-condensing)   |
| Storage 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: 2018, CB: IEC 62368-1: 2014, 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, IP54: IEC 60529-2013   |

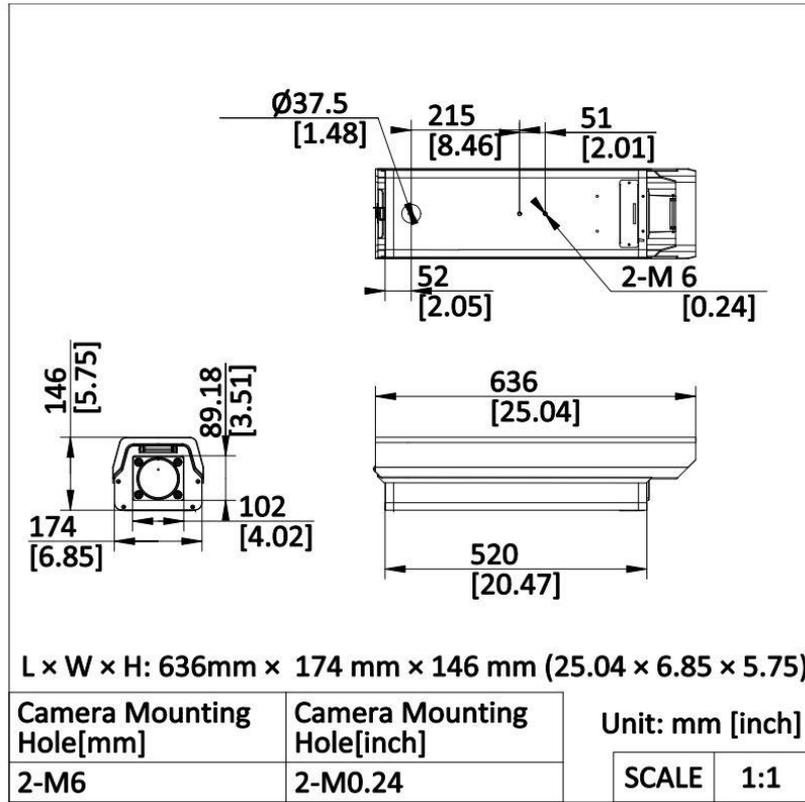
## ▪ Typical Application

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



▪ Optional

| DS-1275ZJ/HWB | DS-1701ZJ/HKB | DS-1278ZJ-HWB |
|---------------|---------------|---------------|
|               |               |               |

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