

iDS-TCV900-BI 9 MP IR ANPR Checkpoint Capture Unit



- High quality imaging with 9 MP resolution (1"GMOS)
- Excellent low-light performance, Color: 0.001 Lux @ (F1.4, AGC ON), 0.0005 Lux with IR
- 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 | 9 MP (1" GMOS) |
| Max. Resolution | 4096 × 2160 |
| Min. Illumination | Color: 0.001 Lux @ (F1.4, AGC ON), 0.0005 Lux with IR |
| Shutter Time | 50 us-20000 us |
| Day & Night | IR cut filter |
| Lens | |
| Lens Type | Fixed focal lens, 25 mm, Varifocal lens, manual adjustment, 11 to 40 mm, (AF) Model: Varifocal lens, motorized lens, 11 to 40 mm |
| Focal Length & FOV | 25 mm, horizontal FOV 32°, vertical FOV 16.8°, diagonal FOV 36.3°, 11 to 40 mm, horizontal FOV 62° to 23.6°, vertical FOV 32.2° to 12.2°, diagonal FOV 70° to 26.8° |
| Focus | Manual, (AF) Model: Auto |
| Aperture | F1.6-C/F1.6-25/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: 50 fps (4096 × 2160, 3840 × 2160, 3392 × 2008, 3072 × 1728, 2688 × 1520, 1920 × 1200, 1920 × 1080, 1280 × 720) 60 Hz: 30 fps (4096 × 2160, 3840 × 2160, 3392 × 2008, 3072 × 1728, 2688 × 1520, 1920 × 1200, 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 6 channels |
| API | ONVIF (PROFILE S, PROFILE G, PROFILE T), ISAPI, SDK, ISUP |
| User/Host | Up to 32 users 3 user levels: administrator, operator and user |

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| 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 | iVMS-4200 (Only for live view and LPR information search), 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/Scheduled/Triggered by alarm in |
| SNR | 60 dB |
| Image Enhancement | BLC, HLC, 3D DNR |
| Picture Overlay | LOGO picture can be overlaid on video with 128 × 128 24-bit bmp format. |
| 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 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, vehicle detector exception, traffic light detector exception |
| Road Traffic and Vehicle Detection | |
| Coverage | Up to 3 lane(s) |
| Trigger Mode | External I/O trigger/Radar trigger/Video trigger |
| Smart Function | License plate recognition, vehicle type classification, vehicle color recognition, no-plate vehicle capture, moving direction detection |

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|---|---|
| LPR Countries/Regions | <p>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,</p> <p>Africa: Nigeria, Kenya, Ivory Coast, 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, the Philippines, Hong Kong, Macao, Taiwan, Myanmar, India, Mongolia, Cambodia, Laos, Bangladesh, Nepal, Sri Lanka,</p> <p>America: Canada, Argentina, Chile, Paraguay, Uruguay, El Salvador, Bolivia, Colombia, Brazil, Ecuador, Peru, Mexico, Panama, Costa Rica, Trinidad and Tobago, the Dominican Republic, Guatemala,</p> <p>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,</p> <p>Russian-Speaking Regions: Azerbaijan, Belarus, Kazakhstan, Lithuania, Georgia, Estonia, Latvia, Russia, Ukraine, Moldova, Uzbekistan, Kyrgyzstan, Armenia, Turkmenistan, Tajikistan</p> |
| Accuracy (Under recommended installation and lighting conditions) | <p>Capture rate > 99%,</p> <p>Vehicle moving direction recognition accuracy > 98.5%,</p> <p>LPR accuracy > 98%,</p> <p>Mistaken capture rate < 2%</p> |
| No License Plate Detection | 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 | <p>84 manufacturers: Hyundai, Toyota, KIA, Honda, Volkswagen, Benz, Nissan, Ford, Isuzu, BMW, Chevrolet, Mitsubishi, Renault, Opel, Suzuki, Skoda, Daewoo, Audi, Mazda, GAC HINO, Peugeot, SsangYong, Citroen, Fiat, Scania, MAN, Volvo, Lexus, Seat, Land Rover, Daihatsu,</p> <p>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</p> |
| License Plate Color Recognition | Customized to support |
| Driving on Lane Line Detection | Supported (only strobe light mode) |
| Lane Change Detection | Supported (only strobe light mode) |
| Wrong-Way Driving Detection | Supported |
| Emergency Lane Occupation | Supported (truck forbidden lane, emergency lane, urban bus lane) |
| Seatbelt Detection | Supported (with flash supplement light) |
| Phone Call Detection | Supported (with flash supplement light) |

| | |
|---------------------|--|
| 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 | 501.0 mm × 175.6 mm × 144.6 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. 5.13 kg (11.31 lb.) |
| With Package Weight | Approx. 7.4 kg (16.31 lb.) |
| Operating Condition | -30 °C to 70 °C (-22 °F to 158°F). Humidity: 5% to 95% (non-condensing) |
| Storage Condition | -30 °C to 60 °C (-22 °F to 140 °F). Humidity: 95% or less (non-condensing) |
| General Function | Password protection, three streams, heartbeat, one-key reset, pixel counter |
| Heater | Supported |
| Language | 8 languages: English, Russian, Croatian, Korean, Russian, Traditional Chinese, Ukrainian, Spanish |
| 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. |

▪ Available Model

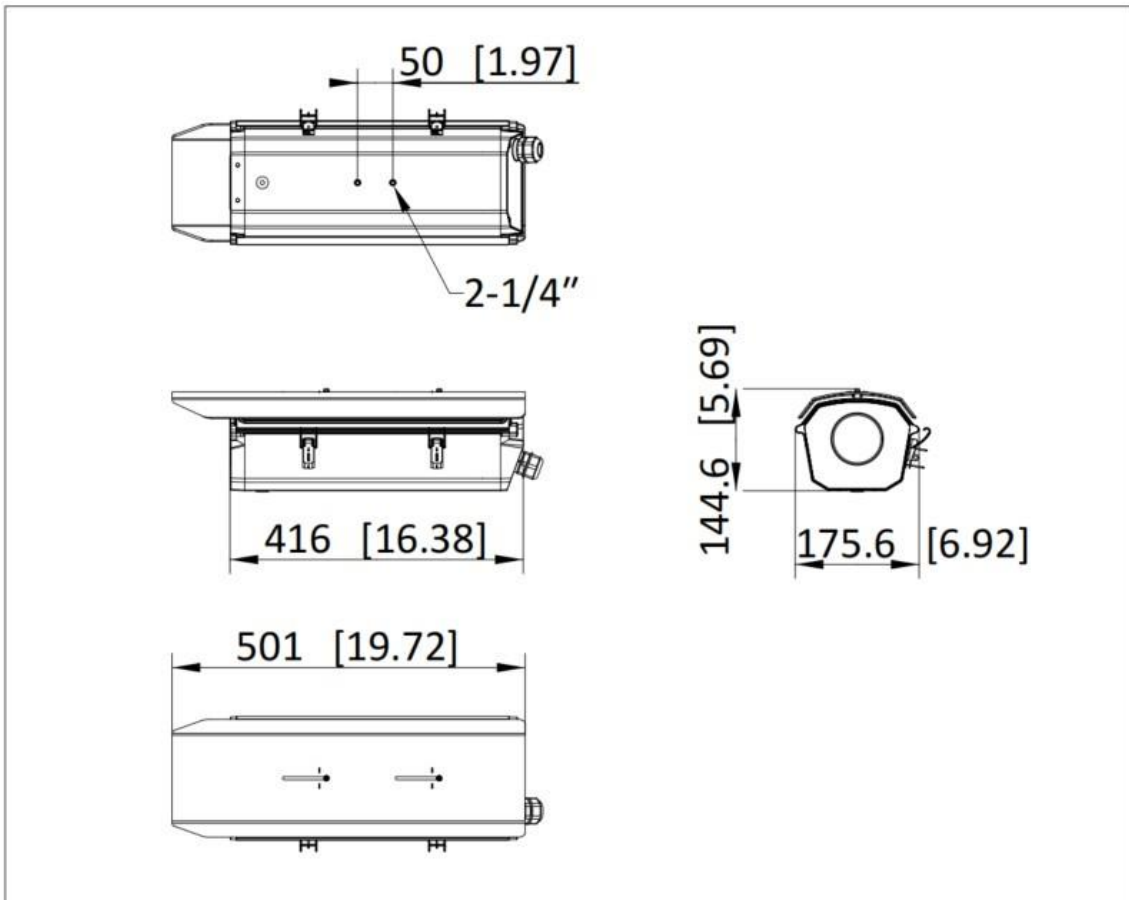
iDS-TCV900-BI(F)/25/H1(24V)

iDS-TCV900-BI(F)/25/H1

iDS-TCV900-BI(F)/1140/H1

iDS-TCV900-BI(F)/1140/H1(AF)

▪ Dimension



L× W× H:501mm× 175.6mm× 144.6mm(19.72× 6.92× 5.69)

| | | | |
|--------------------------|----------------------------|-----------------|-----|
| Camera Mounting Hole[mm] | Camera Mounting Hole[inch] | Unit: mm [inch] | |
| 2-6.35 | 2-1/4" | SCALE | 1:1 |

▪ **Accessory**

▪ **Included**

**DS-1232ZJ-T/BJH
Cardan Joint**



▪ **Optional**

**DS-1275ZJ-BJH/600mm
Hoop & Bracket**



**DS-1278ZJ-HWB
Hoop & Bracket**



**DS-1701ZJ/HKB
Hoop & Bracket**



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