

## iDS-TCV991-HIR Dual 9 MP ANPR All-Rounder Traffic Camera



- High quality low illumination imaging with 9 MP resolution (1" GMOS × 2).
- Built-in millimeter-wave radar in the high-frequency range.
- Excellent low-light performance, color: 0.001 Lux @ (F1.4, AGC ON), B/W: 0.0005 Lux @ (F1.4, AGC ON).
- All-in-one design, integrating camera, radar and supplement light.
- Support 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.
- Built-in deep learning algorithm, support intelligent recognition function, support license plate recognition (LPR) and target full structure.

## ▪ Specification

Camera	
Image Sensor	1" GMOS × 2
Max. Resolution	4096 × 2160
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	54 us – 40000 us
Day & Night	IR cut filter
Lens	
Lens Type	Channel 1: Fixed focal lens, 25 mm, Channel 2: Fixed focal lens, 50 mm
Focal Length & FOV	Channel 1: Horizontal FOV 32°, vertical FOV 16.8°, diagonal FOV 36.3°, Channel 2: Horizontal FOV 16.2°, vertical FOV 8.6°, diagonal FOV 18.2°
Focus	Auto
Iris Type	Fixed iris
Aperture	Channel 1: F1.6, Channel 2: F1.4
Illuminator	
Built-in Supplement Light Type	IR light
Light Bead	8
IR Wavelength	850 nm
Built-in Supplement Light Range for LPR	Up to 50 m
External Supplement Light	Strobe and flash light
Radar	
Working Frequency	24.05 ~ 24.25 GHz
Modulation Waveform	FMCW
Detection Distance	100 m
Speed Measuring Range	10 to 300 km/h
Max. Detectable Targets	Up to 50
Speed Measuring Accuracy	± 2 km/h
Coverage Lanes	Up to 6 lane(s)
Trigger Mode	Approaching direction, Leaving direction
Video	
Main Stream	50 Hz: 25 fps (4096 × 2160, 3840 × 2160, 3392 × 2008, 3072 × 1728, 2688 × 1520, 1920 × 1200, 1920 × 1080, 1280 × 720) 60 Hz: 24 fps (4096 × 2160, 3840 × 2160, 3392 × 2008, 3072 × 1728, 2688 × 1520, 1920 × 1200, 1920 × 1080, 1280 × 720)
Sub-Stream	50 Hz: 25 fps (3072 × 1728, 2688 × 1520, 1920 × 1200, 1920 × 1080, 1280 × 720, 704 × 576) 60 Hz: 24 fps (3072 × 1728, 2688 × 1520, 1920 × 1200, 1920 × 1080, 1280 × 720, 704 × 576)
Third Stream	50 Hz: 25 fps (1280 × 720, 704 × 576, 352 × 288) 60 Hz: 24 fps (1280 × 720, 704 × 576, 352 × 288)

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
Scalable Video Coding (SVC)	H.264 and H.265 encoding
<b>PTZ</b>	
Pan	Channel 2: $\pm 6^\circ$
Tilt	Channel 2: $\pm 5^\circ$
<b>Network</b>	
Protocols	TCP/IP, HTTP, HTTPS, DDNS, RTSP, NTP, FTP, SFTP, DHCP, DNS, RTP, IPv4/IPv6, UDP, SSL/TLS, ICMP, RTCP, SNMP, IGMP, 802.1X, QoS, ISUP, ARP
Simultaneous Live View	Up to 10 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, Watermark, Basic and digest authentication for HTTP/HTTPS, RTP/RTSP over HTTPS, Control timeout settings, Security audit log, IP address filter, WSSE and digest authentication for ONVIF, Host authentication (MAC address)
Network Storage	Micro SD/TF card (512 GB), Local storage, CVR, NVR, ANR
Client	Hik-Central Master, Hik-Central Pro, Hik-Central Enterprise, HikCentral Master Lite
Web Browser	IE9 to IE11, Chrome V61+, IE9 to IE11, Firefox V41+, Edge
<b>Image</b>	
Image Settings	Saturation, Brightness, Contrast, Sharpness, AGC
Day/Night Switch	Auto, Schedule, Manual
Image Enhancement	BLC, 3D DNR
<b>Interface</b>	
Ethernet Interface	1 RJ45 10 M/100 M/1000 M self-adaptive Ethernet port(s)
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
<b>Event</b>	
Basic Event	HDD Error, network disconnected, IP address conflicted
<b>Road Traffic and Vehicle Detection</b>	
Coverage	Up to 6 lane(s)
Trigger Mode	Video trigger
Smart Function	No-plate vehicle capture, Moving direction detection, Motorcycle helmet detection, Manned motorcycle detection, License plate recognition, Vehicle type classification, Vehicle color recognition, Congestion, Stopped Vehicle, Construction, Fallen Object

<p>LPR Countries/Regions</p>	<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>
<p>Vehicle Manufacturer</p>	<p>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&amp;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, Leveo, Leopaard, Lynk &amp; 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</p>
<p>Accuracy (Under recommended installation and lighting conditions)</p>	<p>Capture rate &gt; 99%,  Vehicle moving direction recognition accuracy &gt; 98.5%,  LPR accuracy &gt; 98%,  Mistaken capture rate &lt; 2%</p>
<p>Motorcycle LPR</p>	<p>Supported</p>

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)
Capture Speed Range	10 to 300 km/h
Speeding	Supported
Low-Speed	Supported
<b>General</b>	
Operating System	Linux
Power	DC 36 V ± 20%, 1.67 A, max. 60 W, 2-core terminal block
Material	Aluminum alloy
Package Dimension	530 mm × 480 mm × 365 mm (20.87" × 18.9" × 14.37") (L × W × H)
Dimension	378.5 mm × 202.9 mm × 257.7 mm (14.90" × 7.99" × 10.15") (L × W × H)
Weight	Approx. 6.64 kg (14.64 lb.)
With Package Weight	Approx. 11.3 kg (24.91 lb.)
Storage Condition	-30 °C to 60 °C (22 °F to 140 °F). Humidity 95% or less (Non-condensing)
Operating Condition	-30 °C to 60 °C (22 °F to 140 °F). Humidity 95% or less (non-condensing)
General Function	Heartbeat, Password protection, NTP time adjustment, One-key reset
Language	8 languages: English, Russian, Croatian, Korean, Russian, Traditional Chinese, Ukrainian, Spanish

## ▪ 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.

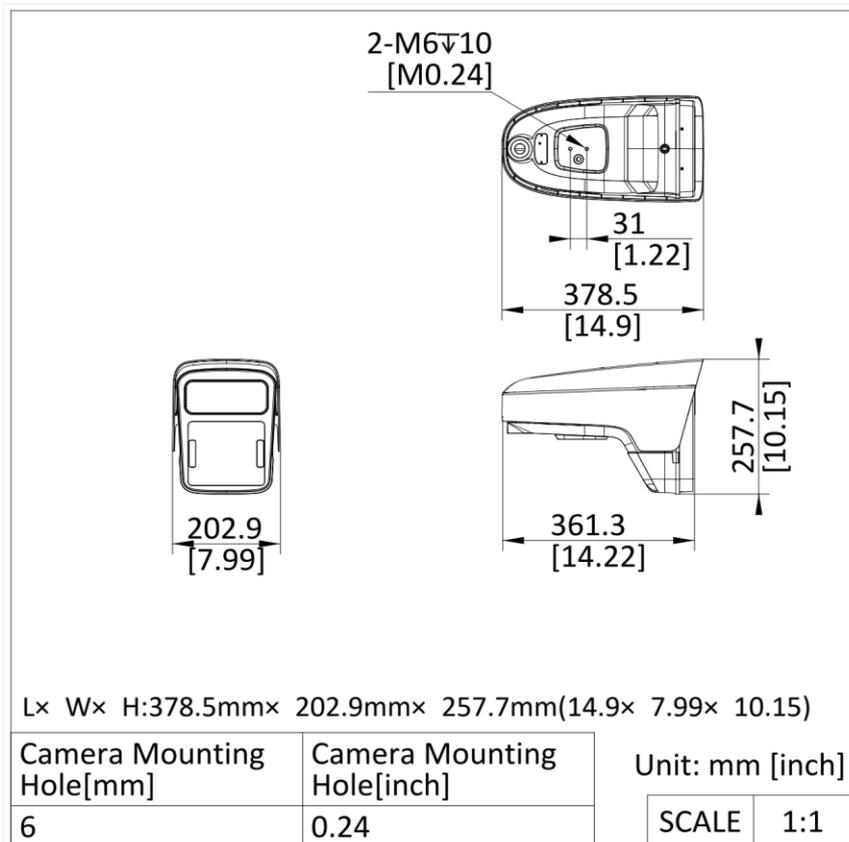
This model has NO SPECIFIC PROTECTION.

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-TCV991-HIR/25/PT50

## ▪ Dimension



▪ Accessory

▪ Included



▪ Optional

DS-1278ZJ-HWB	DS-1701ZJ/HWB	DS-1275ZJ-HWB/600 mm	DS-1278ZJ-BJH

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