

iDS-TCV500-HI/IM Tyre and Axle Recognition Unit



- High quality imaging with 5 MP resolution (2/3" 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.
- Supports stitching the vehicle side pictures into an overview picture, outputting pictures of max. 32768 × 2048 resolution.
- Axle and tyre type recognition.

▪ Specification

Camera	
Image Sensor	2/3" GMOS
Max. Resolution	2496 × 2048
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	50 to 20000 μs
Day & Night	IR cut filter
Lens	
Lens Type	Varifocal lens, manual adjustment, 5.7 to 21 mm
Focal Length & FOV	5.7 to 21 mm, horizontal FOV 81.2° to 25.2°, vertical FOV 67.9° to 21.1°, diagonal FOV 105.4° to 32.7°
Focus	Auto
Aperture	F1.7-3.2
Illuminator	
Built-in Supplement Light Range	Up to 30 m
IR Wavelength	850 nm
External Supplement Light	Strobe light
Video	
Main Stream	50 Hz: 100 fps (2496 × 2048, 1920 × 1080, 704 × 576) 60 Hz: 120 fps (2496 × 2048, 1920 × 1080, 704 × 576)
Sub-Stream	50 Hz: 25 fps (1920 × 1080, 704 × 576) 60 Hz: 30 fps (1920 × 1080, 704 × 576)
Video Compression	Main stream: H.265/H.264/MJPEG, Sub-stream: 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, IGMP, 802.1X, IPv4/IPv6, UDP, ISUP, ARP
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
Security	Password protection, HTTPS encryption, Control timeout settings, Complicated password
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, White balance, AGC, 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 512 GB

Alarm	2 input interfaces (T1, SYNC), 7 output interfaces
RS-485	3 RS-485 (half duplex, HIKVISION)
RS-232	1 RS-232
USB	1 USB 2.0 interface(s)
Event	
Basic Event	HDD error, Network disconnected, IP address conflict
Road Traffic and Vehicle Detection	
Smart Function	Axle total number recognition, Tyre total number recognition, Axle type recognition
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 × 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 (11.3 lb.)
With Package Weight	Approx. 7.4 kg (16.3 lb.)
Operating Condition	-40 °C to 70 °C (-40 °F to 158 °F). Humidity: 5% to 95% (non-condensing)
Storage Condition	-30 °C to 70 °C (-22 °F to 158 °F). Humidity 95% or less (Non-condensing)
General Function	One-key reset, Three streams, Heartbeat, Password protection
Heater	Supported
Language	English
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	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.

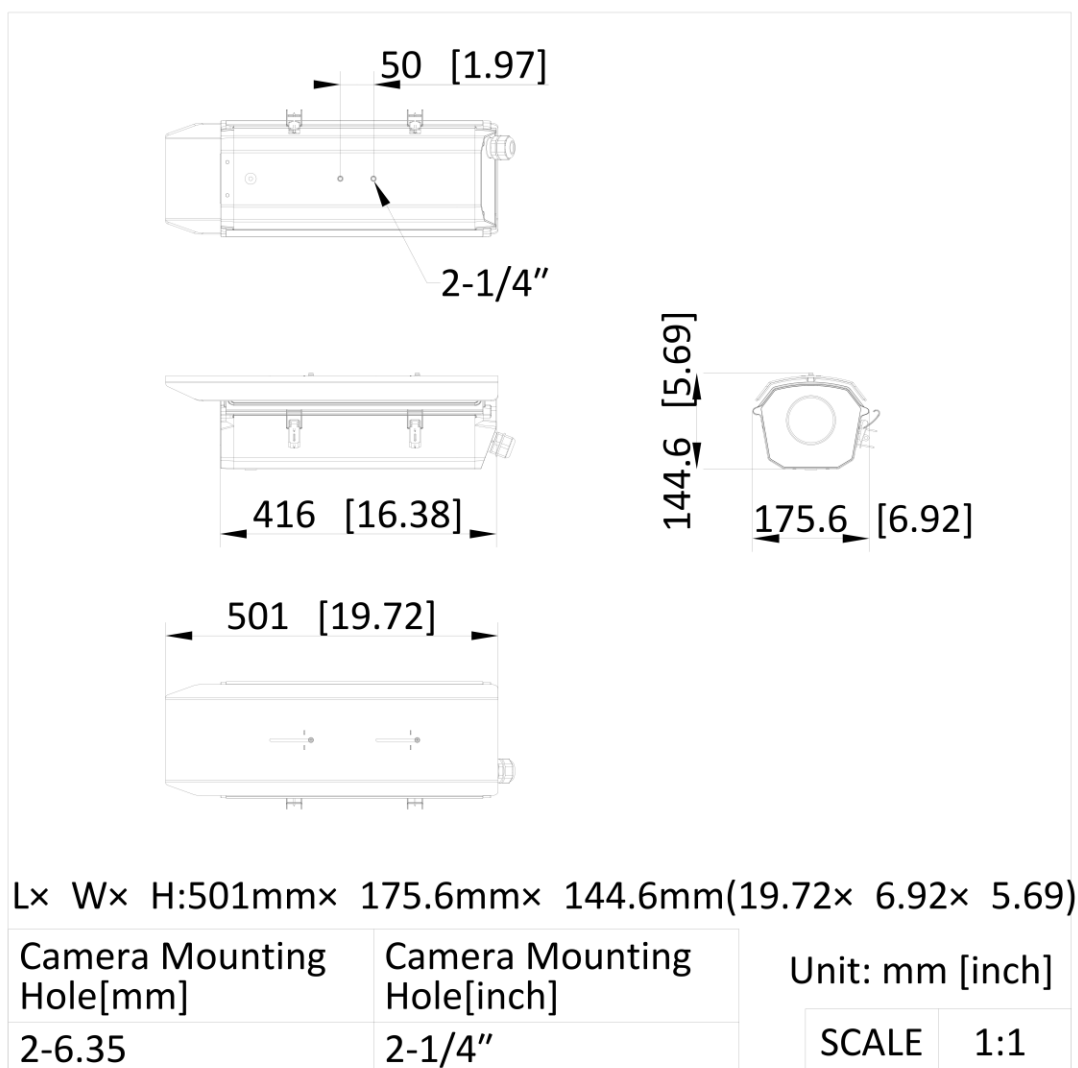
This model has NO SPECIFIC PROTECTION.

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.

▪ Available Model

iDS-TCV500-HI/IM/5721/H1

▪ Dimension



▪ Accessory

▪ Optional

DS-1275ZJ/HWB Hoop & Bracket	DS-1275ZJ-HWB/600mm Hoop & Bracket
	

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