

## iDS-TCM403-GIR 4 MP Radar-Assisted ANPR Bullet Camera



- High quality imaging with 4 MP resolution(1/1.8" CMOS)
- Built-in 77GHz high frequency millimeter wave radar
- Clear imaging against strong back light due to 140 dB WDR technology
- Built-in ANPR engine, equipped with AI algorithm
- Efficient H.265+ compression technology to save bandwidth and storage
- Water and dust resistant (IP67) and vandal proof (IK10)

## ▪ Specification

| Camera                          |  |
|---------------------------------|--|
| Image Sensor                    | 1/1.8" progressive scan CMOS   |
| Max. Resolution                 | 2688 × 1520  |
| Min. Illumination               | Color: 0.0005 Lux @ (F1.2, AGC ON), B/W: 0.0001 Lux @ (F1.2, AGC ON), 0 Lux with IR  |
| Shutter Time                    | 1/25 s to 1/100,000 s  |
| Day & Night                     | IR cut filter  |
| Lens                            |  |
| Focal Length & FOV              | 2.8 to 12 mm: Horizontal: 113.5° to 39°, Vertical: 58.4° to 22.7°, Diagonal: 141.3° to 44.3°<br>8 to 32 mm: Horizontal: 41.9° to 15.1°, Vertical: 22.9° to 8.64°, Diagonal: 48.8° to 17.3° |
| Focus                           | Auto   |
| Iris Type                       | DC-IRIS  |
| Aperture                        | 2.8 to 12 mm: F1.38,<br>8 to 32 mm: F1.7   |
| Illuminator                     |  |
| Built-in Supplement Light Type  | IR light   |
| Supplement Light Number         | 3  |
| Built-in Supplement Light Range | Up to 50 m   |
| IR Wavelength                   | 850 nm   |
| Radar                           |  |
| Working Frequency               | 77 GHz   |
| Modulation Waveform             | FMCW   |
| Detection Distance              | Up to 50 m   |
| Speed Measuring Range           | up to 120 km/h   |
| Horizontal Detection Angle      | ± 22°  |
| Vertical Detection Angle        | ± 10°  |
| Speed Measuring Accuracy        | ± 2 km/h   |
| Coverage Lanes                  | Up to 3 lane(s)  |
| Video                           |  |
| Main Stream                     | 50 Hz: 25 fps (2688 × 1520, 1920 × 1080, 1280 × 760, 704 × 576, 352 × 288)<br>60 Hz: 30 fps (2688 × 1520, 1920 × 1080, 1280 × 760, 704 × 576, 352 × 288)                                   |
| Sub-Stream                      | 50 Hz: 25 fps (1920 × 1080, 1280 × 760, 704 × 576, 352 × 288)<br>60 Hz: 30 fps (1920 × 1080, 1280 × 760, 704 × 576, 352 × 288)   |
| Third Stream                    | 50 Hz: 25 fps (1280 × 760, 704 × 576, 352 × 288)<br>60 Hz: 30 fps (1280 × 760, 704 × 576, 352 × 288)   |
| Video Compression               | H.264 and H.265 encoding<br>Main stream: H.265/H.264/MJPEG<br>Sub-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   |
| <b>Audio</b>                              |  |
| Audio Compression                         | G.711/G.722.1  |
| Audio Bit Rate                            | 8Kbps (G.711) /16Kbps (G.722.1)  |
| <b>Network</b>                            |  |
| Protocols                                 | TCP/IP, ICMP, HTTP, HTTPS, FTP, SFTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, NTP, SMTP, SNMP, IGMP, QoS, IPv4/IPv6, UDP, SSL/TLS, ISUP, ARP, 802.1X   |
| Simultaneous Live View                    | Up to 6 channels   |
| API                                       | ISAPI, SDK, ISUP, ONVIF (PROFILE S, PROFILE G, PROFILE T, PROFILE M)   |
| User/Host                                 | Up to 32 users<br>3 user levels: administrator, operator, and user   |
| Security                                  | Password protection, Complicated password, HTTPS encryption, 802.1X authentication (EAP-PEAP, EAP-LEAP, EAP-MD5), Watermark, IP address filter, Basic and digest authentication for HTTP/HTTPS, WSSE and digest authentication for ONVIF, RTP/RTSP over HTTPS, Control timeout settings, Security audit log, TLS 1.2, 1.3, Host authentication (MAC address) |
| Network Storage                           | Micro SD/TF card (512 GB), local storage and CVR, NVR, ANPR  |
| Web Browser                               | Chrome V61+, IE9 to IE11, Firefox V41+, Edge   |
| <b>Image</b>                              |  |
| Image Settings                            | Saturation, Brightness, Contrast, Sharpness, Gain, White balance, AGC, Adjustable by client software or web browser.   |
| Day/Night Switch                          | Auto/Scheduled/Manual  |
| Wide Dynamic Range (WDR)                  | 140 dB   |
| Image Enhancement                         | BLC, 3D DNR  |
| <b>Interface</b>                          |  |
| Ethernet Interface                        | 1 RJ45 10M/100M/1000M Ethernet interface   |
| On-Board Storage                          | Built-in memory card slot, supporting microSD/SDHC/SDXC card, up to 512 GB   |
| Audio                                     | Supported  |
| Alarm                                     | 1 input interface, 1 output interface, 2 relays  |
| RS-485                                    | 1 RS-485 interface   |
| Wiegand                                   | 1 Wiegand (CardID 26bit, SHA-1 26bit, Hik 34bit)   |
| <b>Event</b>                              |  |
| Basic Event                               | HDD error, Network disconnected, IP address conflict   |
| <b>Road Traffic and Vehicle Detection</b> |  |
| Coverage                                  | Up to 3 lane(s)  |
| Smart Function                            | License plate recognition<br>Vehicle type classification, color identification, no-plate vehicle capture, vehicle driving direction detection  |

|   |   |
|---|---|
| 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 &gt; 99%,</p> <p>Vehicle moving direction recognition accuracy &gt; 98.5%,</p> <p>LPR accuracy &gt; 98%,</p> <p>Mistaken capture rate &lt; 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<br>Recognizable at daytime only.  |
| Vehicle Manufacturer  | 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, 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   |
| Capture Speed Range   | 5 to 120 km/h   |
| <b>General</b>  |   |
| Operating System  | Linux   |
| Power   | 12 VDC to 24 VDC, 1.25 A, max. 15 W, two-core terminal block, PoE: 802.3at, Type 2, Class 4, max. 15 W  |
| Material  | Aluminum alloy  |
| Dimension   | 429.5 mm × 120 mm × 184.2 mm (16.9" × 4.72" × 7.3") (L × W × H)   |
| Package Dimension   | 520 mm × 408 mm × 213 mm (20.5" × 16.1" × 8.4") (L × W × H)   |
| Weight  | Approx. 2.3 kg (5.07 lb.)   |
| With Package Weight   | Approx. 4.8 kg (10.58 lb.)  |

|                           |  |
|---------------------------|--|
| Operating Condition       | -30 °C to 70 °C (-22 °F to 158 °F). Humidity 95% or less (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, watermark  |
| Language                  | 8 languages: English, Thai, Croatian, Korean, Russian, Traditional Chinese, Ukrainian, Spanish   |
| <b>Approval</b>           |  |
| RF                        | EN 301 489-1 V2.2.3, EN 301 489-51 V2.1.1, EN 301 091-1 V2.1.1, EN IEC 62311;2020  |
| 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+A11, CB: IEC 62368-1: 2018 + A11, CE-LVD: EN 62368-1: 2014/A11: 2017   |
| 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   |
| Anti-Corrosion Protection | -Y: NEMA 4X (NEMA 250-2018)  |

## ▪ 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.

/Y model: This model has MODERATE PROTECTION.

Without /Y model: 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.  |

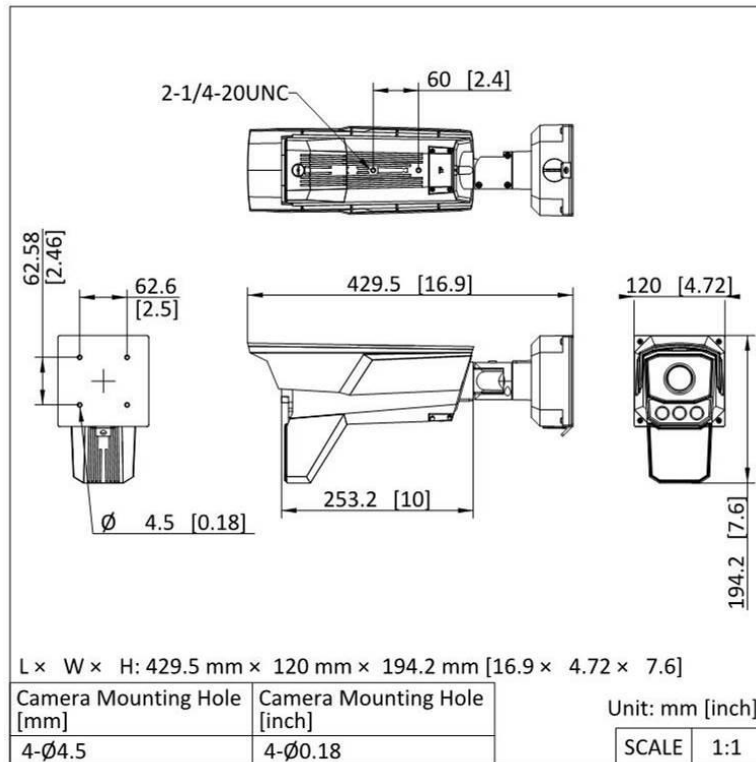
## ▪ Available Model

iDS-TCM403-GIR/POE/0832

iDS-TCM403-GIR/POE/2812

iDS-TCM403-GIR/Y/POE/0832

▪ **Dimension**



▪ **Accessory**  
▪ **Optional**

| DS-1275ZJ-BJH/600mm<br>Hoop & Bracket | DS-1275ZJ-BJH/127mm<br>Hoop & Bracket | DS-1701ZJ/BJH<br>Hoop & Bracket | DS-1232ZJ-T/BJH<br>Cardan Joint | DS-1278ZJ-BJH<br>Hoop & Bracket |
|---------------------------------------|---------------------------------------|---------------------------------|---------------------------------|---------------------------------|
|                                       |                                       |                                 |                                 |                                 |
|                                       |                                       |                                 |                                 |                                 |

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