

# iDS-TCM403-AFR <u>High Performance ANPR Bullet Camera</u>





# **DeepinView**





















The ANPR series ultra-low light smart cameras are able to capture vehicle and recognize vehicle number plate of various countries and regions in dim light environment. It offers high resolution, 140dB WDR, Auto-iris, PoE, Defog, EIS, 3D DNR, etc., to meet a wide variety of applications.

- ANPR Capture rate > 99% (certain countries and regions)
- ANPR recognition rate > 98% (certain countries and regions)
- Classification: Truck, Car, Bus, Van, Motorbike
- KEMLER / ONU codes recognition



- 1/1.8" progressive scan CMOS
- 50 Hz: 2688 × 1520 @ 25 fps
- 60 Hz: 2688 × 1520 @ 30 fps
- Color: 0.001 Lux @ (F1.2, AGC ON), 0.0005
   Lux with IR
- H.265, H.264
- 140 dB WDR
- 3D DNR
- Alarm I/O
- 1 RS-485 interface, wiegand interface
- IR illuminator 850nm range up to 100 m
- Two defined streams
- Built-in microSD/TF card, up to 128G
- License Plate Recognition
- IP67, IK10



www.hikvision.com



### **Superiority**

- Dedicated camera for ANPR
  - HD resolution
  - Integrated IR
  - Professional shutter speed control
- Built-in ANPR engine, equipped with AI algorithm

### **Application**

- Traffic monitoring
- Toll collection
- Security

#### **Scenarios**

- Tunnel
- Toll station
- Urban road

#### **Smart Function**

- Support vehicle type classification
- Support vehicle color identification
- Support no-plate vehicle capture
- Support driving direction detection
- Support motorcycle capture
- Support ADR(KEMLER/ONU codes) recognition









# **Specification**

Camera	iDS-TCM403-AFR/0832		
Image Sensor	1/1.8" progressive scan CMOS		
Min. Illumination	Color: 0.001 Lux @ (F1.2, AGC ON), 0.0005 Lux with IR		
Shutter Speed	1/25 s to 1/100,000 s		
Slow Shutter	Supported		
Day & Night	IR cut filter		
Digital Noise Reduction	3D DNR		
WDR	140 dB		
Lens			
Focal Length	8-32 mm		
Aperture	F1.63-1.8		
Focus	Auto		
Auto-iris	DC drive		
FOV	Horizontal FOV: 39.7° to 15.9°;		
	Vertical FOV: 22.3° to 9.1°;		
	Diagonal FOV: 45.8° to 18.1°		
IR			
IR View Range of Camera	Up to 100 m		
Wavelength	850 nm		
Compression Standard			
Video Compression	Main stream: H.265/H.264/MJPEG Sub-stream: H.265/H.264/MJPEG Third stream: H.265/H.264/MJPEG		
H.264 Type	Baseline profile/Main profile/High profile		
H.265 Type	Baseline profile/Main profile/High profile		
Video Bit Rate	32 Kbps to 16 Mbps		
Audio Compression	G.711/G.722.1		
Audio Bit Rate	8Kbps (G.711) /16Kbps (G.722.1)		
Smart Feature			
Recognition	License Plate Recognition		
Smart Function	Vehicle type classification, color identification, no-plate vehicle capture, vehicle driving direction detection, ADR recognition		
Road Traffic and Vehicle Dete	Road Traffic and Vehicle Detection		



Countries/Regions	Mid-East:
Countries/Regions	Turkey, United Arab Emirates, Qatar, Iran, Iraq, Egypt, Jordan, Kuwait, Saudi Arabia,
	Tunisia, Palestine, Pakistan
	Africa:
	South Africa, Kenya, Nigeria, Tanzania, Mauritius, Morocco
	Asia-Pacific:
	Australia, New Zealand, Indonesia, Malaysia, Singapore, South Korea, Thailand, Vietnam,
	the Philippines, Hong Kong, Macao, Taiwan, Burma, Japan, India, Mongolia
	America:
	United States of America, Colombia, Brazil, Ecuador, Peru, Mexico
	Europe:
	Croatia, Slovenia, Bosnia and Herzegovina, Serbia, Montenegro, Slovakia, Czech Republic,
	Bulgaria, Macedonia, Hungary, Greece, Poland, France, Netherlands, Switzerland, Spain,
	United Kingdom, Ireland, Germany, Italy, Austria, Israel
	Russian-Speaking Regions:
	Azerbaijan, Belarus, Kazakhstan, Lithuania, Georgia, Estonia, Latvia, Russian Federation,
	Ukraine, Moldova, Belarus, Uzbekistan
	Capture rate > 98%
A	Driving direction recognition accuracy > 98.5%
Accuracy (Under recommended	LPR accuracy > 98%  Mistaken capture rate < 2%
installation and lighting	·
conditions)	European and Russian-Speaking Regions:  LPR accuracy > 98%
	Country/Region recognition accuracy > 95%
Lane number	Support 2 lane detection
Capture Speed Range	5 to 165km/h
No License Plate Detection	Yes
Motorcycle LPR	Yes
Vehicle Type	Car/Van/Bus/Truck/Motorbike/Others  IR Model: Recognizable at daytime only
Vehicle Color	Red, yellow(including orange), green, blue, purple, brown, white, grey(including silver),
	black
	IR Model: Recognizable at daytime only
Whitelist and Blacklist	
	IR Model: Recognizable at daytime only
Whitelist and Blacklist	IR Model: Recognizable at daytime only
Whitelist and Blacklist	IR Model: Recognizable at daytime only Up to 2048
Whitelist and Blacklist  Image  Max. Resolution	IR Model: Recognizable at daytime only  Up to 2048  2688 × 1520  50 Hz: 25 fps (2688 × 1520, 1920 × 1080, 1280 × 720, 704 × 576, 352 × 288)
Whitelist and Blacklist  Image  Max. Resolution  Main Stream	IR Model: Recognizable at daytime only  Up to 2048  2688 × 1520  50 Hz: 25 fps (2688 × 1520, 1920 × 1080, 1280 × 720, 704 × 576, 352 × 288) 60 Hz: 30 fps (2688 × 1520, 1920 × 1080, 1280 × 720, 704 × 576, 352 × 288)  50 Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 576, 352 × 288)
Whitelist and Blacklist  Image  Max. Resolution  Main Stream  Sub-Stream	IR Model: Recognizable at daytime only  Up to 2048  2688 × 1520  50 Hz: 25 fps (2688 × 1520, 1920 × 1080, 1280 × 720, 704 × 576, 352 × 288) 60 Hz: 30 fps (2688 × 1520, 1920 × 1080, 1280 × 720, 704 × 576, 352 × 288)  50 Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 576, 352 × 288) 60 Hz: 30 fps (1920 × 1080, 1280 × 720, 704 × 576, 352 × 288)  50 Hz: 25 fps (1280 × 720, 704 × 576, 352 × 288)
Whitelist and Blacklist  Image  Max. Resolution  Main Stream  Sub-Stream  Third Stream	IR Model: Recognizable at daytime only  Up to 2048  2688 × 1520  50 Hz: 25 fps (2688 × 1520, 1920 × 1080, 1280 × 720, 704 × 576, 352 × 288) 60 Hz: 30 fps (2688 × 1520, 1920 × 1080, 1280 × 720, 704 × 576, 352 × 288)  50 Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 576, 352 × 288) 60 Hz: 30 fps (1920 × 1080, 1280 × 720, 704 × 576, 352 × 288) 50 Hz: 25 fps (1280 × 720, 704 × 576, 352 × 288) 60 Hz: 30 fps (1280 × 720, 704 × 480, 640 × 480)
Whitelist and Blacklist  Image  Max. Resolution  Main Stream  Sub-Stream  Third Stream  Image Enhancement	IR Model: Recognizable at daytime only  Up to 2048  2688 × 1520  50 Hz: 25 fps (2688 × 1520, 1920 × 1080, 1280 × 720, 704 × 576, 352 × 288) 60 Hz: 30 fps (2688 × 1520, 1920 × 1080, 1280 × 720, 704 × 576, 352 × 288)  50 Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 576, 352 × 288)  60 Hz: 30 fps (1920 × 1080, 1280 × 720, 704 × 576, 352 × 288)  50 Hz: 25 fps (1280 × 720, 704 × 576, 352 × 288)  50 Hz: 25 fps (1280 × 720, 704 × 576, 352 × 288)  60 Hz: 30 fps (1280 × 720, 704 × 480, 640 × 480)  BLC, HLC, 3D DNR  Rotation mode, saturation, brightness, contrast, sharpness, AGC, and white balance are
Whitelist and Blacklist  Image  Max. Resolution  Main Stream  Sub-Stream  Third Stream  Image Enhancement  Image Settings	IR Model: Recognizable at daytime only  Up to 2048  2688 × 1520  50 Hz: 25 fps (2688 × 1520, 1920 × 1080, 1280 × 720, 704 × 576, 352 × 288) 60 Hz: 30 fps (2688 × 1520, 1920 × 1080, 1280 × 720, 704 × 576, 352 × 288)  50 Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 576, 352 × 288) 60 Hz: 30 fps (1920 × 1080, 1280 × 720, 704 × 576, 352 × 288) 60 Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 576, 352 × 288) 50 Hz: 25 fps (1280 × 720, 704 × 576, 352 × 288) 60 Hz: 30 fps (1280 × 720, 704 × 480, 640 × 480)  BLC, HLC, 3D DNR  Rotation mode, saturation, brightness, contrast, sharpness, AGC, and white balance are adjustable via client software or web browser.
Whitelist and Blacklist  Image  Max. Resolution  Main Stream  Sub-Stream  Third Stream  Image Enhancement  Image Settings  Video Compression	Up to 2048  2688 × 1520  50 Hz: 25 fps (2688 × 1520, 1920 × 1080, 1280 × 720, 704 × 576, 352 × 288) 60 Hz: 30 fps (2688 × 1520, 1920 × 1080, 1280 × 720, 704 × 576, 352 × 288)  50 Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 576, 352 × 288)  50 Hz: 30 fps (1920 × 1080, 1280 × 720, 704 × 576, 352 × 288)  60 Hz: 30 fps (1920 × 1080, 1280 × 720, 704 × 576, 352 × 288)  50 Hz: 25 fps (1280 × 720, 704 × 576, 352 × 288)  60 Hz: 30 fps (1280 × 720, 704 × 480, 640 × 480)  BLC, HLC, 3D DNR  Rotation mode, saturation, brightness, contrast, sharpness, AGC, and white balance are adjustable via client software or web browser.  H.264 and H.265 encoding
Whitelist and Blacklist  Image  Max. Resolution  Main Stream  Sub-Stream  Third Stream  Image Enhancement  Image Settings  Video Compression  Day/Night Switch	IR Model: Recognizable at daytime only  Up to 2048  2688 × 1520  50 Hz: 25 fps (2688 × 1520, 1920 × 1080, 1280 × 720, 704 × 576, 352 × 288) 60 Hz: 30 fps (2688 × 1520, 1920 × 1080, 1280 × 720, 704 × 576, 352 × 288)  50 Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 576, 352 × 288) 60 Hz: 30 fps (1920 × 1080, 1280 × 720, 704 × 576, 352 × 288)  50 Hz: 25 fps (1280 × 720, 704 × 576, 352 × 288)  50 Hz: 25 fps (1280 × 720, 704 × 576, 352 × 288)  60 Hz: 30 fps (1280 × 720, 704 × 480, 640 × 480)  BLC, HLC, 3D DNR  Rotation mode, saturation, brightness, contrast, sharpness, AGC, and white balance are adjustable via client software or web browser.  H.264 and H.265 encoding  Auto/Scheduled/Triggered by alarm in



Alarm Trigger	HDD Error, Network Disconnected, IP Address Conflicted, Vehicle Detector Exception
	Traffic Light Detector Exception
Protocols	TCP/IP, HTTP, HTTPS, FTP, DNS, RTP, RTSP, RTCP, NTP, UPnP, IPv6, UDP
Security Measures	Password protection, HTTPS encryption, digest authentication for HTTP/HTTPS, digest authentication for ONVIF (Version 2.1)
General Function	One-key reset, three streams, heartbeat, password protection, watermark
API	ONVIF (Version 2.1, PROFILE S, PROFILE G), ISAPI, SDK
Simultaneous Live View	Up to 20 channels
User/Host	Up to 32 users 3 user levels: administrator, operator, and user
Client	iVMS-4200, Hik-Central
Web Browser	IE7+
Interface	
Audio	Supported
Communication Interface	1 RJ45 10M/100M/1000M Ethernet interface 1 RS-485 interface 1 Wiegand interface
Alarm	1 input interface, 1 output interface, 2 relays
Video Output	Network
On-Board Storage	Built-in microSD/TF card, up to 128 GB
Reset Button	Supported
General	
Firmware Version	V4.2.2
Operating System	Linux
Certifications	CE, FCC, RoHS
Operating Conditions	Temperature: -30 °C to +70 °C (-22 °F to +158 °F) , Humidity: 95% or less (non-condensing)
Power Supply	12 VDC to 24 VDC ± 20%, PoE (802.3at, class 4)
Power Consumption	Max. 12 W
Protection Level	IP67, IK10
Material	Aluminum alloy
Dimensions	With package: 428.5 × 120 × 132.8 mm
Weight	Camera: approx. 3.12 ± 0.5 kg (6.88 ± 1.1 lb)

<sup>\*</sup> Listed resolutions are only selectable options. It does not mean that all streams can work at their maximum resolution at the same time.

### **Available Model**

iDS-TCM403-AFR/0832



# **Application Scenario**







Urban Road

Mixed Road

Highway Toll

# **Application Performance**

• Urban road, mixed road, etc.





Day

Night



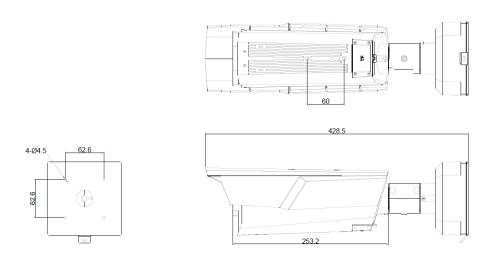


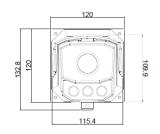
Day

Night



# **Dimension**





Unit: mm

### Accessory

