

Specification

Camera	iDS-TCM403-A(I)
Image Sensor	1/1.8" Progressive Scan CMOS
Min. Illumination	Color: 0.001 Lux @ (F1.2, AGC ON), 0.0001 Lux with IR
Shutter Speed	1/25 s to 1/100,000 s
Slow Shutter	Yes
Day & Night	IR Cut Filter
Digital Noise Reduction	3D DNR
WDR	140 dB
Lens	
Focal Length	4 to 11 mm, 8 to 32 mm
Aperture	4 to 11 mm :F1.38, 8 to 32 mm:F1.63~1.8
Focus	Auto
FOV	4 to 11 mm, horizontal FOV 114.7° to 41.9°, vertical FOV 59.4° to 23.6°, diagonal FOV 141.5° to 48.1°
	8 to 32 mm, horizontal FOV 39.7° to 15.9°, vertical FOV 22.3° to 9.1°, diagonal FOV 45.8° to 18.1°
Auto-iris	DC drive
IR	
IR Range	4 to 11 mm, Up to 50 m 8 to 32 mm, 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
Н.264 Туре	Baseline Profile/Main Profile/High Profile
Н.265 Туре	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 model classification, color identification, no-plate vehicle capture, driving direction detection
Road Traffic and Vehicle De	tection



Countries/Regions	Mid-East:
	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, 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 > 99%
Accuracy	Driving direction recognition accuracy > 98.5%
(Under recommended	Mistaken capture rate < 1.5% (entrance/exit), < 2%
installation and lighting conditions)	European and Russian-Speaking Regions:
	LPR accuracy > 98.5% Country/Region recognition accuracy > 99.4%
No Linear Dista Datastica	
No License Plate Detection	Yes
Motorcycle LPR	Yes
Image Max. Resolution	2688 × 1520
wax. Resolution	50 Hz: 25 fps (2688 × 1520, 1920 × 1080, 1280 × 720, 704 × 576, 352 × 288)
Main Stream	
	60 Hz: 30 fps (2688 × 1520, 1920 × 1080, 1280 × 720, 704 × 576, 352 × 288)
Sub-Stream	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 (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)
Sub-Stream	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)
Sub-Stream	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)
Sub-Stream Third Stream	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) Rotation mode, saturation, brightness, contrast, sharpness, AGC, and white balance are
Sub-Stream Third Stream Image Settings	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) Rotation mode, saturation, brightness, contrast, sharpness, AGC, and white balance are adjustable via client software or web browser.
Sub-Stream Third Stream Image Settings SVC	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) Rotation mode, saturation, brightness, contrast, sharpness, AGC, and white balance are adjustable via client software or web browser. H.264 and H.265 encoding
Sub-Stream Third Stream Image Settings SVC Day/Night Switch	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) 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
Sub-Stream Third Stream Image Settings SVC Day/Night Switch Video Overlay	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) 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
Sub-Stream Third Stream Image Settings SVC Day/Night Switch Video Overlay Network Network Storage	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) 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 Logo picture can be overlaid on video with 128 × 128 in 24-bit bitmap format
Sub-Stream Third Stream Image Settings SVC Day/Night Switch Video Overlay Network	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) 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 Logo picture can be overlaid on video with 128 × 128 in 24-bit bitmap format microSD/TF card (128 GB), local storage, CVR, NVR, ANR
Sub-Stream Third Stream Image Settings SVC Day/Night Switch Video Overlay Network Network Storage	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) 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 Logo picture can be overlaid on video with 128 × 128 in 24-bit bitmap format microSD/TF card (128 GB), local storage, CVR, NVR, ANR HDD Error, Network Disconnected, IP Address Conflicted, Vehicle Detector Exception, Traffic
Sub-Stream Third Stream Image Settings SVC Day/Night Switch Video Overlay Network Network Storage Alarm Trigger	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) 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 Logo picture can be overlaid on video with 128 × 128 in 24-bit bitmap format microSD/TF card (128 GB), local storage, CVR, NVR, ANR HDD Error, Network Disconnected, IP Address Conflicted, Vehicle Detector Exception, Traffic Light Detector Exception
Sub-Stream Third Stream Image Settings SVC Day/Night Switch Video Overlay Network Network Storage Alarm Trigger Protocols	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) 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 Logo picture can be overlaid on video with 128 × 128 in 24-bit bitmap format microSD/TF card (128 GB), local storage, CVR, NVR, ANR HDD Error, Network Disconnected, IP Address Conflicted, Vehicle Detector Exception, Traffic Light Detector Exception TCP/IP, HTTP, HTTPS, FTP, DNS, DDNS, RTP, RTSP, RTCP, NTP, UPnP, IPv6, UDP Password protection, HTTPS encryption, digest authentication for HTTP/HTTPS, digest
Sub-Stream Third Stream Image Settings SVC Day/Night Switch Video Overlay Network Network Storage Alarm Trigger Protocols Security Measures	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) 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 Logo picture can be overlaid on video with 128 × 128 in 24-bit bitmap format microSD/TF card (128 GB), local storage, CVR, NVR, ANR HDD Error, Network Disconnected, IP Address Conflicted, Vehicle Detector Exception, Traffic Light Detector Exception TCP/IP, HTTP, HTTPS, FTP, DNS, DDNS, RTP, RTSP, RTCP, NTP, UPnP, IPv6, UDP Password protection, HTTPS encryption, digest authentication for HTTP/HTTPS, digest authentication for ONVIF (Version 2.1)
Sub-Stream Third Stream Image Settings SVC Day/Night Switch Video Overlay Network Network Storage Alarm Trigger Protocols Security Measures General Function	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) 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 Logo picture can be overlaid on video with 128 × 128 in 24-bit bitmap format microSD/TF card (128 GB), local storage, CVR, NVR, ANR HDD Error, Network Disconnected, IP Address Conflicted, Vehicle Detector Exception, Traffic Light Detector Exception TCP/IP, HTTP, HTTPS, FTP, DNS, DDNS, RTP, RTSP, RTCP, NTP, UPnP, IPv6, UDP Password protection, HTTPS encryption, digest authentication for HTTP/HTTPS, digest authentication for ONVIF (Version 2.1) One-key reset, three streams, heartbeat, password protection, watermark
Sub-Stream Third Stream Image Settings SVC Day/Night Switch Video Overlay Network Network Storage Alarm Trigger Protocols Security Measures General Function API	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) 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 Logo picture can be overlaid on video with 128 × 128 in 24-bit bitmap format microSD/TF card (128 GB), local storage, CVR, NVR, ANR HDD Error, Network Disconnected, IP Address Conflicted, Vehicle Detector Exception, Traffic Light Detector Exception TCP/IP, HTTP, HTTPS, FTP, DNS, DDNS, RTP, RTSP, RTCP, NTP, UPnP, IPv6, UDP Password protection, HTTPS encryption, digest authentication for HTTP/HTTPS, digest authentication for ONVIF (Version 2.1) One-key reset, three streams, heartbeat, password protection, watermark ONVIF (Version 2.1), ISAPI, SDK



Web December	157.
Web Browser	IE7+
Interface	
Audio	Yes
Communication Interface	1 RJ45 10M/100M/1000M Ethernet interface, 1 RS-485 interface, Wiegand interface
Alarm	1 input, 1 output, 2 relays
Video Output	Network
On-Board Storage	Built-in microSD/TF card, up to 128 GB
Reset Button	Yes
General	
Firmware Version	V4.2.2
Operating Conditions	Temperature: -30 °C to +70 °C (-22 °F to +158 °F) , -H: -40 °C to +60 °C (-40 °F to +140 °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
Heater	-H: yes
Material	Aluminum alloy
Dimensions	With package: 428.5 × 120 × 132.8 mm (16.87" × 4.72" × 5.23")
Weight	Camera: approx. 3.12 ± 0.5 kg (6.88 ± 1.1 lb)

^{*} Listed resolutions are only selectable options. It does not mean that all streams can work at their maximum resolution at the same time.

Application Scenario









Urban Road Mixed Road Entrance & Exit

Highway Toll Station

^{*-}H: Heater supported