PRODUCT QUICK GUIDE INTELLIGENT TRAFFIC SYSTEM January-June 2023



Intelligent Traffic System

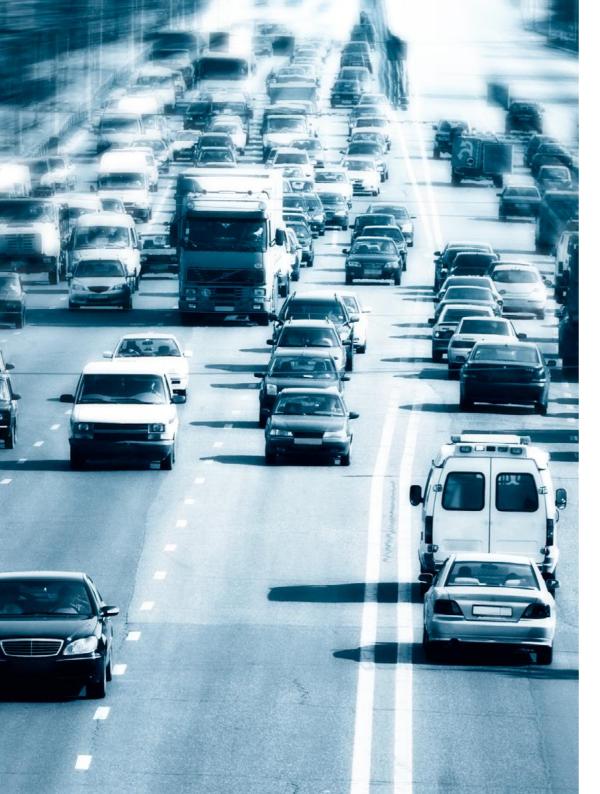
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Intelligent Traffic System

As city populations grow, so do car ownership and the burdens on urban traffic systems. The key objective remains keeping everyone moving safely and responsibly on the road, optimizing the use of available transportation and parking resources, and responding to traffic and security events as swiftly as possible. Hikvision's Intelligent Traffic System helps alleviate these concerns altogether. It effectively regulates traffic order by detecting and managing various road violations, such as running the red light, speeding, improper lane usage, illegal parking, etc. It also helps optimize traffic flow and ease gridlock by adjusting red and green light durations according to actual road conditions. An ITS guidance screen can be placed near congested areas to display alternate route information to keep traffic under control, reduce driver frustration, and relieve officers from having to manually directing traffic in dangerous conditions.





Intelligent Traffic System Checkpoint System

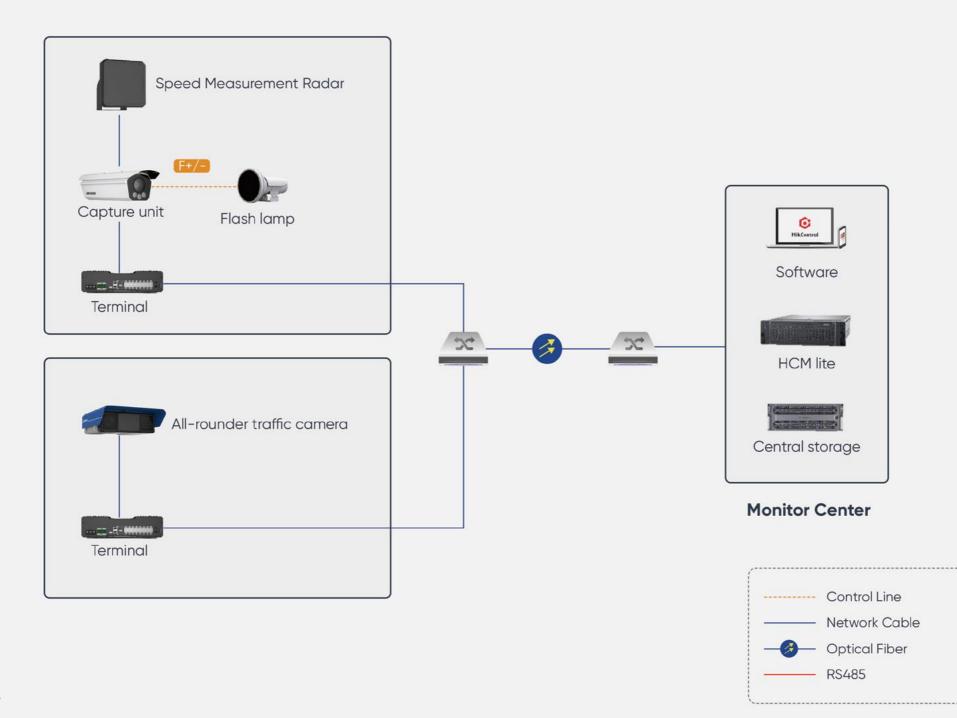
The checkpoint capture system is designed for applications in urban roads and expressways. When a vehicle passes by, information such as the license plate, type, color, and radar-detected speed will be collected and utilized by our professional video management platform for further applications, such as intelligent vehicle searches, for example.

A 20 MP checkpoint capture unit is newly released, which is capable of capturing clearer pictures, more details, and larger scenes. And the coverage lanes are up to 5 lanes.

- > High quality imaging with up to 20 MP resolution (1.1"GMOS)
- > Excellent low-light performance
- > Efficient H.265 compression technology
- > 3D DNR technology delivers clean and sharp images
- High-precision Speed Detection Radar with a velocity range of 10 to 320 km/h
- > Supports automatic number plate recognition (ANPR)
- > Vehicle feature recognition: vehicle type, color, manufacture, number plate recognition, no-plate vehicle capture
- Violation detection: driving on lane line, Illegal lane change, wrong-way driving, seatbelt and phone use violations
- Application scenarios: highways, tunnels, toll stations, urban roads, etc.

All-Rounder Traffic Camera

Model	iDS-TCV507-BIR/1550	iDS-TCV907-BIR(F)/1140	iDS-TCV507-BER/1550	iDS-TCV907-BER(F)/1140	
lmage	(Deep Learning)	(HOT Deep Learning)	HOT Deep Learning	(HOT	
Image Sensor	2/3" GMOS	1″GMOS	2/3" GMOS	1" GMOS	
Resolution	2464 × 2056	4096 × 2160	2464 × 2056	4096 × 2160	
Video Compression	H.265/H.264/MJPEG	H.265/H.264/MJPEG	H.265/H.264/MJPEG	H.265/H.264/MJPEG	
Lens	15-50 mm	11-40 mm	15-50 mm	11-40 mm	
Light Range	Up to 40 m				
Light Beads	16	16	16	16	
Wavelength	850 nm	850 nm	-	-	
Central Frequency	24.05 to 24.25 GHz				
Measurement Accuracy	-2 to +2 km/h				
Velocity Range	10 to 320 km/h				
Tracking Target	Up to 32	Up to 32	Up to 32	Up to 32	
Double Trigger	Approaching direction, leaving direction, and both				
Coverage	1-2 lanes	up to 3 lanes	1-2 lanes	up to 3 lanes	
LPR Accuracy	> 98 %	> 98 %	> 98 %	> 98 %	
Smart Function Standard Protocols	Vehicle type classification, vehicle color recognition, no- plate vehicle capture, moving direction detection TCP/IP, HTTP, HTTPS, FTP, DNS, RTP, RTSP, RTCP, NTP, IPv6, UDP	Vehicle type classification, vehicle color recognition, no- plate vehicle capture, moving direction detection TCP/IP, HTTP, HTTPS, FTP, DNS, RTP, RTSP, RTCP, NTP, IPv6, UDP	Vehicle type classification, vehicle color recognition, no- plate vehicle capture, moving direction detection TCP/IP, HTTP, HTTPS, FTP, DNS, RTP, RTSP, RTCP, NTP, IPV6, UDP	Vehicle type classification, vehicle color recognition, no- plate vehicle capture, moving direction detection TCP/IP, HTTP, HTTPS, FTP, DNS, RTP, RTSP, RTCP, NTP, IPv6, UDP	
Driving on Lane Line Detection	Support	Support	Support	Support	
Illegal Lane Change Detection	Support	Support	Support	Support	
Wrong-way Driving Detection	Support	Support	Support	Support	
Emergency Lane Occupation	Support (truck forbidden lane, emergency lane, urban bus lane)	Support (truck forbidden lane, emergency lane, urban bus lane)	Support (truck forbidden lane, emergency lane, urban bus lane)	Support (truck forbidden lane, emergency lane, urban bus lane)	
Seatbelt Detection	Support (with flash light)				
Phone Call Detection	Support (with flash light)				
Frame Rate	50 Hz: 50 fps; 60 Hz: 30 fps	50 Hz: 25 fp; 60 Hz: 30 fps	50 Hz: 50 fps; 60 Hz: 30 fps	50 Hz: 25 fps; 60 Hz: 30 fps	
Protection Level	IP65	IP65	IP65	IP65	
Local Storage	TF card, up to 128 GB				
Weight	Approx. 7.2 kg (15.9 lb.)				
Dimensions (W \times H \times D)	With package: 375 × 372 × 141 mm (14.8 × 14.6 × 5.6 inch)	With package: 375 × 372 × 141 mm (14.8 × 14.6 × 5.6 inch)	With package: 375 × 372 × 141 mm (14.8 × 14.6 × 5.6 inch)	With package: 375 × 372 × 141 mm (14.8 × 14.6 × 5.6 inch)	
Operating Temperature	-30 °C to 70 °C (-22 °F to 158 °F)	-30 °C to 70 °C (-22 °F to 158 °F)	-30 °C to 70 °C (-22 °F to 158 °F)	-30 °C to 70 °C (-22 °F to 158 °F)	
Humidity	95 % or less, non-condensing				
Power	36 VDC ± 20 % / 100 to 240 VAC	36 VDC ± 20 % / 100 to 240 VAC	36 VDC ± 20 % / 100 to 240 VAC	36 VDC \pm 20 % / 100 to 240 VAC	



Checkpoint Capture Unit

Model	iDS-TCV500-BE(F)/1550/H1	iDS-TCV500-BI(F)/1550/H1	iDS-TCV900-BE(F)/1140/H1	iDS-TCV900-BI(F)/1140/H1	iDS-TCV900-BI(F)/1140/H1(AF)
lmage	Chor	Chep Learning	Chep Learning	Chep Learning)	Cheep Learning
Image Sensor	2/3″GMOS	2/3″GMOS	1" GMOS	1"GMOS	1" GMOS
Resolution	2464 × 2056	2464 × 2056	4096 × 2160	4096 × 2160	4096 × 2160
Video Compression	H.265/H.264/MJPEG	H.265/H.264/MJPEG	H.265/H.264/MJPEG	H.265/H.264/MJPEG	H.265/H.264/MJPEG
Lens	15-50 mm	15-50 mm	11-40 mm	11-40 mm	Motorized Lens, 11-40mm
Light Range	Up to 30 m	Up to 30 m	Up to 27 m	Up to 27 m	Up to 27 m
Coverage	1-2 lanes	1-2 lanes	2-3 lanes	2-3 lanes	2-3 lanes
LPR Accuracy	> 98 %	> 98 %	> 98 %	> 98 %	> 98%
Supplement Light	External strobe/flash/continuous light	External strobe/flash/continuous light	External strobe/flash/continuous light	External strobe/flash/continuous light	External strobe/flash/continuous light
Smart Function	Vehicle type classification, vehicle color recognition, no-plate vehicle capture, moving direction detection	Vehicle type classification, vehicle color recognition, no-plate vehicle capture, moving direction detection	Vehicle type classification, vehicle color recognition, no-plate vehicle capture, moving direction detection	Vehicle type classification, vehicle color recognition, no-plate vehicle capture, moving direction detection	Vehicle type classification, vehicle color recognition, no-plate vehicle capture, moving direction detection
Standard Protocols	TCP/IP, HTTP, HTTPS, FTP, DNS, RTP, RTSP, RTCP, NTP, IPv6, UDP	TCP/IP, HTTP, HTTPS, FTP, DNS, RTP, RTSP, RTCP, NTP, IPv6, UDP	TCP/IP, HTTP, HTTPS, FTP, DNS, RTP, RTSP, RTCP, NTP, IPv6, UDP	TCP/IP, HTTP, HTTPS, FTP, DNS, RTP, RTSP, RTCP, NTP, IPv6, UDP	TCP/IP, HTTP, HTTPS, FTP, DNS, RTP, RTSP, RTCP, NTP, IPv6, UDP
Driving on Lane Line Detection	Support (only strobe light mode)				
Illegal Lane Change Detection	Support (only strobe light mode)				
Wrong-Way Driving Detection	Support	Support	Support	Support	Support
Emergency Lane Occupation	Support (truck forbidden lane, emergency lane, urban bus lane)	Support (truck forbidden lane, emergency lane, urban bus lane)	Support (truck forbidden lane, emergency lane, urban bus lane)	Support (truck forbidden lane, emergency lane, urban bus lane)	Support (truck forbidden lane, emergency lane, urban bus lane)
Seatbelt Detection	Support (with flash light)				
Phone Call Detection	Support (with flash light)				
Capture Speed Range	10 to 320km/h				
Frame Rate	50 Hz: 50 fps 60 Hz: 30 fps	50 Hz: 50 fps 60 Hz: 30 fps	50 Hz: 25 fps 60 Hz: 30 fps	50 Hz: 25 fps 60 Hz: 30 fps	50 Hz: 25 fps 60 Hz: 30 fps
Protection Level	IP66	IP66	IP66	IP66	IP66
Local Storage	TF card, up to 128 GB				
Weight	6.5 ± 0.5 kg (14.3 ± 1.1 lb)	6.5 ± 0.5 kg (14.3 ± 1.1 lb)	6.5 ± 0.5 kg (14.3 ± 1.1 lb)	6.5 ± 0.5 kg (14.3 ± 1.1 lb)	6.5 ± 0.5 kg (14.3 ± 1.1 lb)
Dimensions (W × H × D)	With package: 175.68 × 137.5 × 443.99 mm (6.92 × 5.41 × 17.48 inch)	With package: 175.68 × 137.5 × 443.99 mm (6.92 × 5.41 × 17.48 inch)	Whith package: 175.68 × 137.5 × 443.99 mm (6.92 × 5.41 × 17.48 inch)	Whith package: 175.68 × 137.5 × 443.99 mm (6.92 × 5.41 × 17.48 inch)	Whith package: 175.68 × 137.5 × 443.99 mm (6.92 × 5.41 × 17.48 inch)
Operating Temperature	-40 °C to +60 °C (-40 °F to +140 °F)	-40 °C to +60 °C (-40 °F to +140 °F)	-40 °C to +60 °C (-40 °F to +140 °F)	-40 °C to +60 °C (-40 °F to +140 °F)	-40 °C to +60 °C (-40 °F to +140 °F)
Humidity	95 % or less, non-condensing	95% or less, non-condensing			
Power	24 VDC ± 20 % / 100 to 240 VAC	24 VDC ± 20 % / 100 to 240 VAC	24 VDC ± 20 % / 100 to 240 VAC	24 VDC ± 20 % / 100 to 240 VAC	24 VDC ± 20% / 100 to 240 VAC

Model	iDS-TCVK00-FI/1140/H1	iDS-TCVK00-FE/1140/H1	Model
Image	(Deep Learning)	Ceep Learning	lmage
Image Sensor	1.1" GMOS	1.1" GMOS	Operating I
Resolution	5120 × 4000	5120 × 4000	HDD Storag
Video Compression	H.265/H.264/MJPEG	H.265/H.264/MJPEG	External St
Lens	11-40mm	11-40mm	
Light Range	Up to 30 m	Up to 30 m	
Coverage	4-5 lanes	4-5 lanes	Network In
LPR Accuracy	> 98%	> 98%	
Supplement Light	External strobe/flash/continuous light	External strobe/flash/continuous light	
Smart Function	Vehicle type classification, vehicle color recognition, no-plate vehicle capture, moving	Vehicle type classification, vehicle color recognition, no-plate vehicle capture, moving	Video Input
Standard Protocols	direction detection TCP/IP, HTTP, HTTPS, FTP, DNS, RTP, RTSP, RTCP,	direction detection TCP/IP, HTTP, HTTPS, FTP, DNS, RTP, RTSP, RTCP,	Reset Butto
Driving on Lane Line	NTP, IPv6, UDP Support (only strobe light mode)	NTP, IPv6, UDP Support (only strobe light mode)	Indicator
Detection Illegal Lane Change	Support (only strobe light mode)	Support (only strobe light mode)	
Detection Wrong-Way Driving	Support	Support	USB Port
Detection Emergency Lane	Support (truck forbidden lane, emergency lane,	Support (truck forbidden lane, emergency lane,	RS232
Occupation Seatbelt Detection	urban bus lane) Support (with flash light)	urban bus lane) Support (with flash light)	RS485
Phone Call Detection	Support (with flash light)	Support (with flash light)	Alarm Input
			Alarm Outp
Capture Speed Range	5 to 250 km/h 50 Hz: 25 fps	5 to 250 km/h 50 Hz: 25 fps	Operating S
Frame Rate	60 Hz: 30 fps	60 Hz: 30 fps	Video
Protection Level	IP66	IP66	
Local Storage	TF card, up to 128 GB	TF card, up to 128 GB	Uploading
Weight	6.5 ± 0.5 kg (14.3 ± 1.1 lb) Whith package: 175.68 × 137.5 × 443.99 mm	6.5 ± 0.5 kg (14.3 ± 1.1 lb) Whith package: 175.68 × 137.5 × 443.99 mm	Power Supp
Dimensions (W × H × D)	(6.92 × 5.41 × 17.48 inch)	(6.92 × 5.41 × 17.48 inch)	Dimension
Operating Temperature	-40 °C to +60 °C (-40 °F to +140 °F)	-40 °C to +60 °C (-40 °F to +140 °F)	(W × D × H)
Humidity	95% or less, non-condensing	95% or less, non-condensing	Working Te
Power	24 VDC ± 20% / 100 to 240 VAC	24 VDC ± 20% / 100 to 240 VAC	Working Hu

Traffic Server

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DS-TP50-08H

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Operating Interface	WEB	WEB
HDD Storage	4 x SATA (up to 6TB each HDD)	1 SATA HDD (Up to 4TB)
External Storage	1 eSATA interface for 1 external HDD	-
Network Interface	16 x 1000 M Ethernet interface 1 x internal 10/100/1000 M self-adaptive Ethernet interface, 1 x external 10/100/1000 M self-adaptive Ethernet interface 1 x internal 1000 M fiber interface 1 x external 1000 M fiber interface	4 x 100M self-adaptive Ethernet Interface 2 x 10/100/1000 M self-adaptive Ethernet interface
Video Input	16-ch	4-ch & 4-ch via switches
Reset Button	1	-
Indicator	4 x indicator (1 x Power Indicator, 1 x Alarm Indicator, 1 x HDD Indicator, 1 x Ready Indicator)	4 x indicator (1 x Power Indicator, 1 x Alarm Indicator, 1 x HDD Indicator, 1 x Ready Indicator)
USB Port	1	1
RS232	2	2
RS485	2	1
Alarm Input	2	1
Alarm Output	2	1
Operating System	Embedded Linux operating system	Embedded Linux operating system
Video	Stores videos. Storage duration depends on stream bitrate and HDD capacity.	Stores videos. Storage duration depends on stream bitrate and HDD capacity.
Uploading	Automatic Network Replenishment (ANR) and manual uploading	Automatic Network Replenishment (ANR) and manual uploading
Power Supply	12 VDC/12.5 A	12 VDC/5 A
Dimension (W × D × H)	370 × 273 × 102.5 mm [14.6 × 10.7 × 4.0 inch]	245 mm × 170 mm × 55 mm [9.6 × 6.7 × 2.1 inch]
Working Temperature	-40 °C to +70 °C (-40 °F to +158 °F)	-30 °C to +70 °C (-220 °F to +158 °F)
Working Humidity	10 % to 90 %	5 % to 95 %

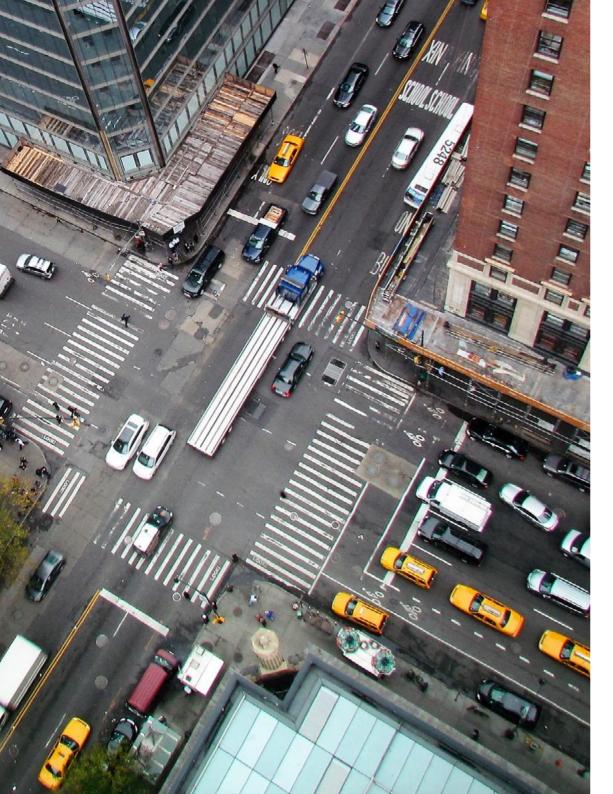
Model	iDS-TSV300-C	Model	DS-TD10N-1	DS-TD10M-1	TSDB00-EMM	Model	DS-TL2000AI-L1	DS-TL2000A-L1
Image	«нот Фота али и на	lmage			TOH	lmage	20000 200000 200000 200000	2000 2000 2000 2000 2000 2000 2000 200
Operating Interface	WEB	Power Supply	9 -12 VDC	9 -12 VDC	12 to 24 VDC	Light Type	IR strobe supplement light	strobe supplement light
HDD Storage	1 × 4 TB 3.5-inch SATA HDD (Default); 4 × 6 TB (Scalable)	Central Frequency	24.15 GHz	24.15 GHz	60 to 61 GHz	LED Lamp Beads	16	16
	Dual NIC design	Modulation Waveform	CW	FMCW	FMCW	Color Temperature Angle of Light	- 10°	5000 K - 7000 K
Network Interface	NIC 1: 9 × Gigabit Ethernet interface, 1 ×combo SFP Gigabit fiber optic interface	Center Frequency Deviation	≤ ±45 MHz	≤ ±45 MHz		Coverage	single lane	Single lane
	NIC 2: 1 × Gigabit Ethernet interface, 1 ×SFP Gigabit fiber optic interface	Antenna Beam Width	6°×6°	35°×16°	-	Effective Distance	16-25 m	16-25 m
Video Input	12-ch	Working Temperature	-40 °C to +70 °C	-40 °C to +70 °C	-40 °C to +70 °C	Trigger Manner	TTL level (switch trigger optional)	TTL level (switch trigger optional)
USB Port	1	Range	-40 °C (0 +70 °C	-40 °C (0 +70 °C	-40 °C l0 +70 °C	Trigger Level	4 V ~ 6 V (High level trigger)	4 V ~ 6 V (High Level Trigger)
RS232	2	Working Humidity Range	5 %RH ~ 95 %RH	5 %RH - 95 %RH	5%RH-95%RH	Trigger Frequency	-	15 Hz-250 Hz
RS485	2	Measurement Accuracy	-4-0 km/h	-2-+2 km/h	-2~+2 km/h	Trigger Duty Ratio	1 % -39 % (Enter the protection state at Duty Radio ≥ 40%)	1 % -39 % (Enter the protection state at Duty Radio ≥ 40%)
	Power indicator, alarm status	Trigger Consistency	≤±lm	≤±1 m	≤±1m	Response Time	≤ 20 us Support ambient brightness detection,	≤ 20 us Support ambient brightness detection,
Display Lamp	indicator, HDD indicator, running status indicator	Velocity Range	10~250 km/h	10~320 km/h	10Km/h-300Km/h	Day and Night Function	automatic start-up at low illumination (optional)	automatic start-up at low illumination (optional)
Operating						Configuration	Ultra-high frequency flash delay setting	Ultra-high frequency flash delay setting
System	Embedded Linux Operating System	Direction Information	Support	Support	Support	Service Life	≥ 50000 H	≥ 50000 H
Upload Function	Supports transportation data ANR andmanual re-uploading.	Double Trigger	Support vehicle front & rear triggering	Support vehicle front & rear triggering	Support vehicle front & rear triggering	Power Supply	220 VAC ±20%, 47 Hz-63 Hz 110 VAC ±20%, 47 Hz-63 Hz	220 VAC ±20%, 47 Hz~63 Hz 110 VAC ±20%, 47 Hz~63 Hz
Kov	Power on/off. Reset	Multiple Lanes	Support up to 1 lane	Support up to 3 lanes	Support up to 1-6	Consumption	Max.36 W (Determined by control model)	Max.36 W (Determined by control model)
Кеу					lanes	Operating Temperature	-40 °C to +70 °C	-40 °C to +70 °C
Power	12 VDC/12.5 A, 150 W	Wi-Fi Setting	Support	Support	Not Support	Operating Humidity	10 %-90 %, no condensation	10 %-90 %, no condensation
Dimension	370 mm × 273 mm × 102.5 mm (14.57 inch × 10.75 inch × 4.04 inch)	Capture Distance	Single lane 18-28 m	18-28 m	18 to 150 m (adjustable)	Weatherproof Rating	IP65	IP65
Operating	-30 °C to 70 °C (-86 °F to 158 °F)	Communication Interface	RS485 (RS232 optional)	RS485, Wi-Fi	RS485, RJ45	Dimension	128 mm (W) × 216 mm (H) × 159 mm (D) Support front-mounted and side-	128 mm (W) × 216 mm (H) × 159 mm (D)
Temperature Operating			190 × 190 × 53 mm	166 × 139 × 40 mm	101 y 177 y 70 0	Mounting Model	Support front-mounted and side- mounted installation (bracket rotation angle -90 ° to +90 °)	Support front-mounted installation (bracket rotation angle -90 ° to +90 °)
Humidity	10 % to 90 %	Dimension	(7.48 × 7.48 × 2.09 inch)	(6.54 × 5.47 × 1.57 inch)	191 x 173 x 38.6mm	Weight	2.72 kg	2.72 kg

Supplement Light

Radar

Model	DS-TL2002AI	DS-TL2002A		
lmage	000000000 00000000 000000000 000000000	82.258550 5255555 5255555 52555555 555555555		
Light Type	IR strobe supplement light	strobe supplement light		
LED Lamp Beads	28	28		
Color Temperature	-	5000 K - 7000 K		
Angle of Light	Support 10°, 40°optional	Support 10°, 40° optional		
Coverage	1 or 3 lanes	1 or 3 lanes		
Effective Distance	16-25 m	16-25 m		
Trigger Manner	TTL level (switch trigger optional)	TTL level (switch trigger optional)		
Trigger Level	4 V – 6 V (High level trigger)	4 V - 6 V (High Level Trigger)		
Trigger Frequency	-	15 Hz - 250 Hz		
Trigger Duty Ratio	1 % - 39 % (Enter the protection state at Duty Radio ≥ 40 %)	1 % - 39 % (Enter the protection state at Duty Radio ≥ 40 %)		
Response Time	≤ 20 us	≤ 20 us		
Day and Night Function	Support ambient brightness detection, automatic start-up at low illumination (optional)	Support ambient brightness detection, automatic start-up at low illumination (optional)		
Configuration	Ultra-high frequency flash delay setting	Ultra-high frequency flash delay setting		
Service Life	≥ 50000 H	≥ 50000 H		
Power Supply	220 VAC ±20 %, 47 Hz ~ 63 Hz 110 VAC ±20 %, 47 Hz ~ 63 Hz	220 VAC ±20 %, 47 Hz ~ 63 Hz		
Consumption	Max.60 W (Determined by control model)	Max.60 W (Determined by control model)		
Operating	-40 °C to +70 °C	-40 °C to +70 °C		
Operating Humidity	10 %-90 %, no condensation	10 %-90 %, no condensation		
Weatherproof Rating	IP65	IP65		
Dimension	322 mm (W) × 270.5 mm (H) × 118 mm (D)	322 mm (W) × 271 mm (H) × 118 mm (D)		
Mounting Model	Support front-mounted and side-mounted installation (bracket rotation angle -90 ° to +90 °)	Support front-mounted installation (bracket rotation angle -90 ° to +90 °)		
Weight	6.28 kg	5.19 Kg		

Model	SL-1211-1	SL-1211-11		
lmage				
Power Supply	AC220V±10 % / 48 Hz ~ 52 Hz	AC220V±10 % / 48 Hz ~ 52 Hz		
Wave Length	-	≥ 850 nm (Infrared)		
Color Temperature	5500 K ± 500 K	5500 K ± 500 K		
Flash energy	200 J	200 J		
Power Consumption	Average < 100 W (@ 1 flash / s), max < 300 W	Average < 100 W (@ 1 flash / s), max < 300 W		
Peak flash duration	1 / 30 ms	1/30ms		
Response Time	Max. 67 ms	Max. 67 ms		
Effective distance	16 m to 25 m	16 m to 25 m		
Trigger Manner	TTL level	TTL level		
Photosensitivity	Through photosensitivity to achieve different brightness during the day and night	Through photosensitivity to achieve different brightness during the day and night		
Grating	Built-in grating (external grating optional); Effectively reducing light pollution	Built-in grating (external grating optional); Effectively reducing light pollution		
Coverage	Single lane	Single lane		
Operating Temperature	-25 - +70 °C	-25 - +70 °C		
Operating Humidity	5 % - 90 % (40 °C), no condensation	5 % - 90 % (40 °C), no condensation		
Service Life	≥20 Million times	≥20 Million times		
Other Functions	Strobe Interval Protect	Strobe Interval Protect		
Protection Level	IP65	IP65		
Weight	3.5 Kg	3.5 Kg		

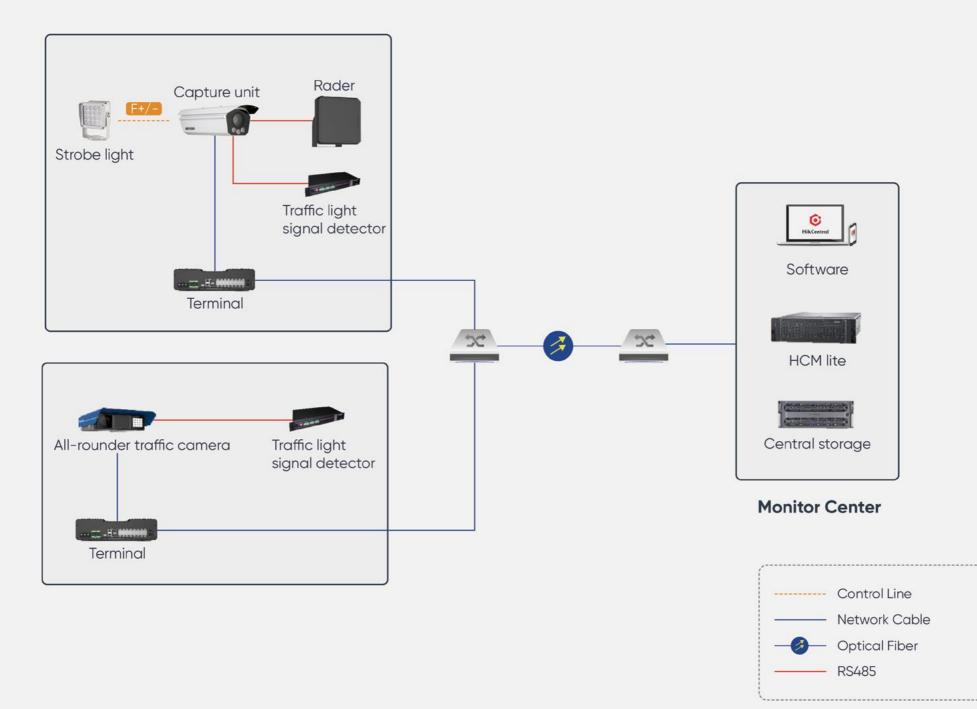


Intelligent Traffic System Intersection Violation System

The Intersection Violation System is designed for use at road intersections to capture illegal driving behaviors. These components provide strong incentives to drivers to abide by all road rules, prevent accidents, and improve traffic efficiency.

Hikvision launched innovative ITS cameras for intersection violation detection. The new All-Rounder Traffic Camera is engineered with an allin-one structure, embedding video, radar and supplemental light in one module, helping traffic authorities ramp up the detection of violations with easier installation and system operation.

- > High quality imaging with up to 9 MP resolution (1" GMOS)
- > Excellent low-light performance, Color: 0.001 lux @ (F1.4, AGC ON)
- > Efficient H.265 compression technology
- > 3D DNR technology delivers clean and sharp images
- > Supports automatic number plate recognition (ANPR)
- > Vehicle feature recognition: vehicle type / vehicle color / manufacturer / number plate color recognition / no-plate vehicle capture
- Violation behaviors detection: running the red light, driving on lane line, illegal lane change, wrong-way driving detection.
- > Application scenarios: intersection, T junction, other red light roads, etc.



All-Rounder Traffic Camera

Model	iDS-TCE507-BR/1550	iDS-TCE907-BR/1140
lmage	(Deep Learning)	(Deep Learning)
Image Sensor	2/3" GMOS	1" GMOS
Resolution	2464 × 2056	4096 × 2160
Video Compression	H.265/H.264/MJPEG	H.265/H.264/MJPEG
Lens	15-50 mm	11-40 mm
Light Range	Up to 40 m	Up to 40 m
Light Beads	16	16
Wavelength	-	-
Central Frequency	24.05 to 24.25 GHz	24.05 to 24.25 GHz
Measurement Accuracy	-4 to 0 km/h	-4 to 0 km/h
Velocity Range	10 to 320 km/h	10 to 320 km/h
Tracking Target	Up to 32	Up to 32
Double Trigger	Approaching direction, leaving direction, and both	Approaching direction, leaving direction, and both
Coverage	1-2 lanes	up to 3 lanes
LPR Accuracy	> 98%	> 98%
Smart Function	Vehicle type, vehicle color, vehicle manufacturer recognition; Radar speed detection; Running the red light, illegal lane change, wrong-way driving, solid line driving, driving in wrong lane at intersection, illegal U-turn detection	Vehicle type, vehicle color, vehicle manufacturer recognition; Radar speed detection; Running the red light, illegal lane change, wrong-way driving, solid line driving, driving in wrong lane at intersection, illegal U-turn detection
Standard Protocols	TCP/IP, HTTP, HTTPS, FTP, DNS, RTP, RTSP, RTCP, NTP, IPv6, UDP	TCP/IP, HTTP, HTTPS, FTP, DNS, RTP, RTSP, RTCP, NTP, IPv6, UDP
Driving on Lane Line Detection	Support	Support
Illegal Lane Change Detection	Support	Support
Wrong-way Driving Detection	Support	Support
Frame Rate	50 Hz: 50 fps, 60 Hz: 30 fps	50 Hz: 25 fps, 60 Hz: 30 fps
Protection Level	IP65	IP65
Local Storage	TF card, up to 128 GB	TF card, up to 128 GB
Weight	Approx. 7.2 kg (15.9 lb.)	Approx. 7.2 kg (15.9 lb.)
Dimensions (W × H × D)	With package: 375 × 372 × 141 mm (14.8 × 14.6 × 5.6 inch)	With package: 375 × 372 × 141 mm (14.8 × 14.6 × 5.6 inch)
Operating Temperature	-30 °C to 70 °C (-22 °F to 158 °F)	-30 °C to 70 °C (-22 °F to 158 °F)
Humidity	95 % or less, non-condensing	95 % or less, non-condensing
Power	36 VDC ± 20 % / 100 to 240 VAC	36 VDC ± 20 % / 100 to 240 VAC

Intersection Violation Unit

Model	iDS-TCE500-B(F)/1550/H1	iDS-TCE900-B(F)/1140/H1		
lmage	CHOT	Chor Comp Learning		
Image Sensor	2/3" GMOS	1"GMOS		
Resolution	2464 × 2056	4096 × 2160		
Video Compression	H.264/H.265/MJPEG	H.265/H.264/MJPEG		
Light Range	15-50 mm	11-40 mm		
Working Distance	Up to 30 m	Up to 27 m		
Coverage	1 -2 lanes	2-3 lanes		
LPR Accuracy	> 98 %	> 98 %		
Supplement Light	External strobe/flash/continuous light	External strobe/flash/continuous light		
Traffic Light Detection	Signal detector analysis/video analysis	Signal detector analysis/video analysis		
Smart Function Illegal Violation Detection	Vehicle type classification, vehicle color recognition, no-plate vehicle capture, moving direction detection Running the red light, Wrong-way driving, Illegal lane change, Solid line driving, Driving in wrong lane at intersection, Illegal U-turn detection	Vehicle type classification, vehicle color recognition, no-plate vehicle capture, moving direction detection Running the red light, Wrong-way driving, Illegal lane change, Solid line driving, Driving in wrong lane at intersection, Illegal U-turn detection		
No License Plate Detection	Support	Support		
Motorbike LPR	Support	Support		
Standard Protocols	TCP/IP, HTTP, HTTPS, FTP, DNS, RTP, RTSP, RTCP, NTP, IPV6, UDP	TCP/IP, HTTP, HTTPS, FTP, DNS, RTP, RTSP, RTCP, NTP, IPv6, UDP		
Frame Rate	50 Hz: 50 fps, 60 Hz: 30 fps	50 Hz: 25 fps, 60 Hz: 30 fps		
Protection Level	IP66	IP66		
Local Storage	micro SD/TF card, up to 128 GB	micro SD/TF card, up to 128 GB		
Weight	6.5 ± 0.5 kg (14.3 ± 1.1 lb)	6.5 ± 0.5 kg (14.3 ± 1.1 lb)		
Dimensions (W × H × D)	With package: 175.68 × 137.5 × 443.99 mm (6.92" × 5.41" × 17.48")	With package: 175.68 × 137.5 × 443.99 mm (6.92" × 5.41" × 17.48")		
Operating Temperature	-40 °C to +60 °C (-40 °F to +140 °F)	-40 °C to +60 °C (-40 °F to +140 °F)		
Humidity	95 % or less, non-condensing	95 % or less, non-condensing		
Power	24 VDC ± 20%/100 to 240 VAC	24 VDC ± 20%/100 to 240 VAC		

Trafffic Signal Detector

Traffic Server

Supplement Light

Model	TLD-2016-6	Model	DS-TP50-16E	DS-TP50-08H	Model	DS-TL2000A-L1	DS-TL2002A
lmage	Kantarina and and	lmage			lmage	200000 200000 2000000 2000000 20000000 2000000	
Interface of AC	16 ch	Operating Interface	WEB	WEB	Light Type	Strobe supplement light	Strobe supplement light
Signal		HDD Storage	4 x SATA (up to 6TB each HDD)	1 SATA HDD (Up to 4TB)	LED Lamp Beads	16	28
RS485 Output	6	External Storage	1 eSATA interface for 1 external HDD	-	Color Temperature	5000 K - 7000 K	5000 K - 7000 K
Interface	D		16 x 1000 M Ethernet interface		Angle of Light	10 °	10°
DC Output			1 x internal 10/100/1000 M self-adaptive Ethernet interface,	4 x 100M self-adaptive Ethernet Interface	Coverage	Single lane	1.5 lane
Interface	5 V dc ouput	Network Interface	1 x external 10/100/1000 M self- adaptive Ethernet interface 1 x internal 1000 M fiber interface	2 x 10/100/1000 M self-adaptive Ethernet interface	Effective Distance	16-25 m	16-25 m
			1 x external 1000 M fiber interface		Trigger Manner	TTL level (switch trigger optional)	TTL level (switch trigger optional)
Pin Switch	5 ch	Video Input	16-ch	4-ch & 4-ch via switches	Trigger Level	4 V - 6 V (High Level Trigger)	4V - 6V (High Level Trigger)
		Reset Button	1	-	Trigger Frequency	15 Hz-250 Hz	15 Hz ~ 250 Hz
Light of Status	16	Indicator	4 x indicator (1 x Power Indicator, 1 x Alarm Indicator, 1 x HDD Indicator, 1 x Ready Indicator)	4 x indicator (1 x Power Indicator, 1 x Alarm Indicator, 1 x HDD Indicator, 1 x Ready Indicator)	Trigger Duty Ratio	1 % -39 % (Enter the protection state at Duty Radio ≥ 40%)	1% -39% (Enter the protection state at Duty Radio ≥ 40%)
Range of		USB Port	1	1	Response Time	≤ 20 us	≤ 20 us
Detection Voltage	140 VAC-270 VAC, 50 Hz/60 Hz	RS232	2	2	Day and Night Function	Support ambient brightness detection, automatic start-up at low illumination (optional)	Support ambient brightness detection, automatic start-up at low illumination (optional)
Working Voltage	220 VAC @ 50 Hz/60 Hz,	RS485	2	1	Configuration	Ultra-high frequency flash delay setting	Ultra-high frequency flash delay setting
Working Voltage	100 VAC-240 VAC	Alarm Input	2	1	Service Life	≥ 50000 H	≥ 50000 H
		Alarm Output	2	1	Power Supply	220 VAC ±20%, 47Hz-63Hz; 110 VAC ±20%, 47Hz-63Hz	220 VAC ±20%, 47 Hz~63 Hz
Consumption	<5 W	Operating System	Embedded Linux operating system	Embedded Linux operating system	Consumption	Max.36W (Determined by control model)	Max.60W (Determined by control model)
Environment		Video	Stores videos. Storage duration depends on stream bitrate and HDD capacity.	Stores videos. Storage duration depends on stream bitrate and HDD capacity.	Operating Temperature	-40 °C to +70 °C	-40 °C to +70 °C
Temperature	-30 °C to +70 °C	Uploading	Automatic Network Replenishment (ANR) and manual uploading	Automatic Network Replenishment (ANR) and manual uploading	Operating Humidity	10 % - 90 %, no condensation	10 % - 90 %, no condensation
Environment		Power Supply	12 VDC/12.5 A	12 VDC	Weatherproof Rating	IP65	IP65
Humidity	5 % - 95 % @ 40 °C	Dimension (W × D × H)	370 × 273 × 102.5 mm (14.6 × 10.7 × 4.0 inch)	245 mm × 170 mm × 55 mm (9.6 × 6.7 × 2.1 inch)	Dimension	128 mm × 216 mm × 159 mm (5.04 × 8.5 × 6.26 inch)	322 mm (W) × 271 mm (H) × 118 mm (D)
Dimensions	440 × 44 × 213.5 mm	Working Temperature	-40 °C to +70 °C (-40 °F to +158 °F)	-30 °C to +70 °C (-220 °F to +158 °F)	Mounting Model	Support front-mounted installation (bracket rotation angle -90 ° to +90 °)	Support front-mounted installation (bracket rotation angle -90 ° to + 90 °)
	(17.32 × 1.73 × 8.41 inch)	Working Humidity	10 % to 90 %	5 % to 95 %	Weight	2.72 kg	5.19 Kg

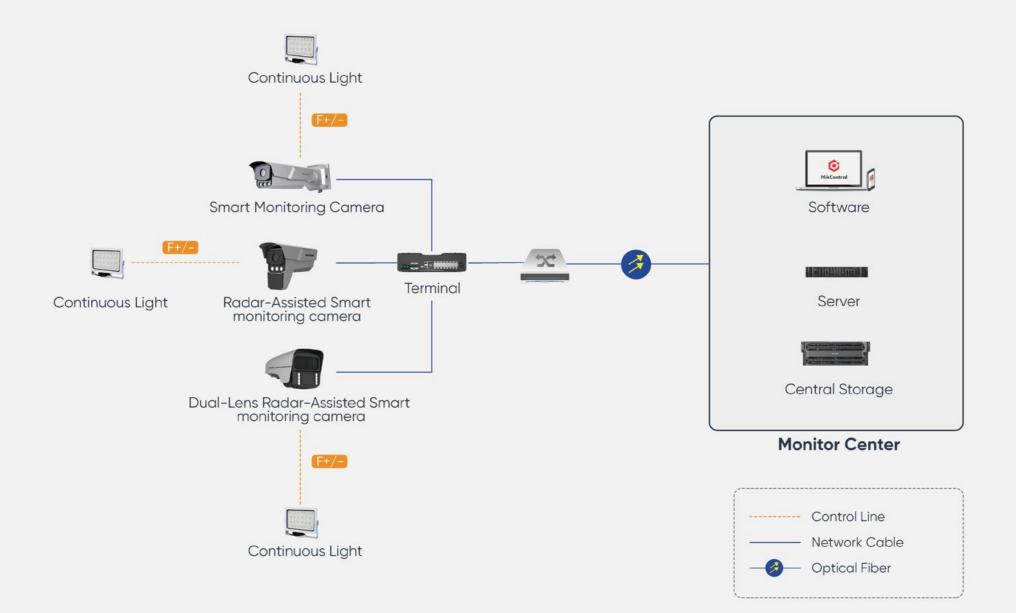


Intelligent Traffic System **Smart Monitoring System**

This system is easy to install and improves efficiency. It monitors large areas and supports vehicle capture, ANPR and speed measurement. DarkFighter technology gives this system excellent image performance at all light levels.

A 4MP radar-assisted dual-sensor smart monitoring camera is newly released, consisting of a fixed-focal lens that can capture large scenes and a varifocal lens for detail capture. As well as radar and video fusion design, the video can analyze full structured data, while the radar performs long-distance detection and high-precision tracking.

- > High quality imaging with up to 4 MP resolution (1/1.8" CMOS)
- > Clear imaging against strong back light with 140 dB WDR technology
- > Excellent low-light performance with DarkFighter technology
- > Motorized vari-focal lens for easy installation and monitoring
- > Efficient H.265 compression technology
- Speed measure between 10-100 km/h and target tracking by high frequency radar
- Smart functions: ANPR, vehicle type, vehicle color, and manufacturer recognition, no-plate vehicle capture, driving direction detection, and motorcycle capture
- Application scenarios: tunnels, toll stations, urban roads, parking entrances



Smart Monitoring Unit

Radar-Assisted Smart Monitoring Camera

Traffic Server

Model	iDS-TCM403-B(G)	iDS-TCM403-BI(G)	Model	iDS-TCM403-EIR	iDS-TCM441-FR	Model	DS-TP50-16E
lmage	(HOT	(HOT	Image	(NEW)	NEW Constant Deep Learning	lmage	
Focal Length	IDS-TCM403-B/0411: 2.8-12mm IDS-TCM403-B/0832: 8-32 mm	IDS-TCM403-BI/0411: 2.8-12mm IDS-TCM403-BI/0832: 8-32 mm	Focal Length	iDS-TCM403-EIR/0411: 4-11 mm iDS-TCM403-EIR/0832: 8-32 mm	Varifocal lens: 10-50mm, P: ± 10°, T: ± 10° Fixed-focal lens: 8mm, T: ± 15°	Operating Interface	WEB
Coverage	1-3 lanes	1-3 lanes	Coverage	1~3 lanes	1~3 lanes	HDD Storage	4 x SATA (up to 6TB each HDD)
Capture Speed Range	5 to 120 km/h	5 to 120 km/h	Radar Detection Distance	20 - 50 m (motor vehicles)	50m (pedestrian)	External Storage	1 eSATA interface for 1 external HDD
Capture Accuracy	99 %	99 %	Radar & Capture Speed Range	10 to 100 km/h	5 to 120 km/h		16 x 1000 M Ethernet interface
LPR Accuracy	98 %	98 %	Speed Measurement Accuracy	-2 to 2 km/h	-2 to 2 km/h	Network Interface	1 x internal 10/100/1000 M self- adaptive Ethernet interface, 1 x external 10/100/1000 M self-
Frame Rate	50 HZ: 2688 × 1520 @ 25 fps 60 HZ: 2688 ×1520 @ 30 fps	50 HZ: 2688 × 1520 @ 25 fps 60 HZ: 2688 ×1520 @ 30 fps	Capture Accuracy	99 %	99%		adaptive Ethernet interface 1 x internal 1000 M fiber interface 1 x external 1000 M fiber interface
Smoot Function	Vehicle type classification, vehicle color recognition, no-	Vehicle type classification, vehicle color recognition, no-	LPR Accuracy	98 %	98%		
Smart Function	plate vehicle capture, moving direction detection	plate vehicle capture, moving direction detection	Frame Rate	50 HZ: 2688 × 1520 @ 25 fps 60 HZ: 2688 ×1520 @ 30 fps	50 HZ: 2688 × 1520 @ 25 fps 60 HZ: 2688 ×1520 @ 30 fps	Video Input	16-ch
Video Compression	H.265/H.264/MJPEG	H.265/H.264/MJPEG		Vehicle type classification, vehicle color recognition, no-plate	Vehicle type classification, vehicle color recognition, no-plate	Reset Button	1
Standard Protocols	TCP/IP, HTTP, HTTPS, FTP, DNS, RTP, RTSP, RTCP, NTP, IPv6, UDP	TCP/IP, HTTP, HTTPS, FTP, DNS, RTP, RTSP, RTCP, NTP, IPv6, UDP	Smart Function	vehicle capture, moving direction detection	vehicle capture, moving direction detection	Indicator	4 x indicator (1 x Power Indicator, 1 x Alarm Indicator, 1 x HDD Indicator, 1 x Ready Indicator)
	1 RJ45 10M/100M/1000M	1 RJ45 10M/100M/1000M	Video Compression	H.265/H.264/MJPEG	H.265/H.264/MJPEG	USB Port	1
Communication Interface	Ethernet interface 1 RS-485 interface	Ethernet interface 1 RS-485 interface	Standard Protocols	TCP/IP, HTTP, HTTPS, FTP, DNS, RTP, RTSP, RTCP, NTP, IPv6, UDP	TCP/IP, HTTP, HTTPS, FTP, DNS, RTP, RTSP, RTCP, NTP, IPv6, UDP	RS232	2
ANPR Camera	1 Wiegand interface 4 MP (1/1.8" CMOS),	1 Wiegand interface 4 MP (1/1.8" CMOS),	Communication Interface	1 RJ45 10 M/100 M/1000 M Ethernet interface 1 RS-485 interface,1 RS-232	1 RJ45 10M/100M/1000M Ethernet interface 1 RS-485 interface	RS485	2
ANPR Camera	max.2688 × 1520	max.2688 × 1520		interface 4 MP (1/1.8'' CMOS), max.2688 ×	1 Wiegand interface 4 MP (1/1.8" CMOS), max.2688 ×	Alarm Input	2
Supplement Light	3 LED lights	3 LED IR lights	ANPR Camera	1520	1520	Alarm Output	2
Protection Level	IP67, IK10	IP67, IK10	Supplement Light	3 LED lights	8 LED IR lights	Operating System	Embedded Linux operating system
Storage	Built-in micro SD/TF card, up to 128 GB	Built-in micro SD/TF card, up to 128 GB	Protection Level	IP67	IP67, IK10	Video	Stores videos. Storage duration depends
Operating & Storage	-30 °C to +70 °C (-22 °F to +158 °F)	-30 °C to +70 °C (-22 °F to +158 °F)	Storage	Built-in micro SD/TF card, up to 128 GB	Built-in micro SD/TF card, up to 128 GB		on stream bitrate and HDD capacity.
Temperature Operating &	Humidity: 95% or less (non-	Humidity: 95% or less (non-	Operating & Storage Temperature	-30 °C to +70 °C (-22 °F to +158 °F)	-30 °C to +70 °C(-22 °F to +158 °F)	Uploading	Automatic Network Replenishment (ANR) and manual uploading
Storage Humidity	condensing)	condensing)	Operating & Storage Humidity	Humidity: 95 % or less (non- condensing)	Humidity: 95% or less (non- condensing)	Power Supply	12 VDC/12.5 A
Dimensions (W × H × D)	428.5 × 120 × 132.8 mm (16.87×4.72×5.23 inch)	428.5 × 120 × 132.8 mm (16.87×4.72×5.23 inch)	Dimensions (W × H × D)	115.5 mm (W) × 184.3 mm (H) × 298.6 mm (D) Without Package	380 × 203.2 × 209.2 mm (14.96×8×8.24 inch)	Dimension (W × D × H)	370 × 273 × 102.5 mm (14.6 × 10.7 × 4.0 inch)
Weight	3.12 ± 0.5 kg (6.88 ± 1.1 lb)	3.12 ± 0.5 kg (6.88 ± 1.1 lb)	Weight	2.5 ± 0.5 kg (5.5 ± 1.1 lb)	5 kg (11.02 lb)	Working Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Power Supply	12 VDC to 24 VDC ± 20%, PoE (802.3at, class 4)	12 VDC to 24 VDC ± 20%, PoE (802.3at, class 4)	Power Supply	12 VDC to 24 VDC ± 20%, Max. 12 W	36 VDC	Working Humidity	10 % to 90 %

Continuous Supplement Light

Model	DS-TP50-08H	Model	DS-TL2002CI	DS-TL2002C	DS-TL2000CI
lmage		lmage	82.40 8 8 9 9 9 6 4 2 8 9 9 2 4 8 8 9 9 2 4 8 8 9 9 2 6 8 8 9 9 2 6 8 8 9 9 2 6 8 8 9 2 6 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9	882 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	
Operating Interface	WEB	Light Type	IR continuous light	Continuous light	IR continuous light
HDD Storage	1 SATA HDD (Up to 4TB)	LED Lamp Beads	28	28	16
Storage		Color Temperature	-	5000 K - 7000 K	-
External Storage	-	Angle of Light	40°	40°	40°
Network Interface	4 x 100 M self-adaptive Ethernet Interface 2 x 10/100/1000 M self-adaptive	Effective Distance	16-25 m	16-25 m	16-25 m
	Ethernet interface	Response Time	≤ 20 us	≤ 20 us	≤ 20 us
Video Input	4-ch & 4-ch via switches	Day and Night Function	Support ambient brightness detection, automatic start-up at low illumination	Support ambient brightness detection, automatic start-up at low illumination	Support ambient brightness detection, automatic start-up at low illumination
Reset Button	-	Brightness Control	Two grades of brightness control	Two grades of brightness control	-
Indicator	4 x indicator (1 x Power Indicator, 1 x Alarm Indicator, 1 x HDD Indicator, 1 x Ready Indicator)	Remote Control	Adopt remote start-up the supplement light via a control line	Adopt remote start-up the supplement light via a control line	-
USB Port RS232	1	Supplement Light	The default output port outputs high voltage (typically SV) [optional], when the light is turned on and the supplement light output current is too large or too small	The default output port outputs high voltage (typically SV) [optional], when the light is turned on and the supplement light output current is too large or too small	-
RS485	1	Exception Detection	Supplement light output current is too large or too small	Supplement light output current is too large or too small	-
Alarm Input	1	Service Life	≥ 50000 H	≥ 50000 H	≥ 50000 H
Alarm Output	1	Housing Material	Die-cast aluminum	Die-cast aluminum	Die-cast aluminum
Adam output	1	Power Supply	220 VAC ±20 %, 47 Hz ~ 63 Hz	220 VAC ±20 %, 47 Hz - 63 Hz	220 VAC ±20 %, 47 Hz ~ 63 Hz
Operating System	Embedded Linux operating system	Consumption	Max. 60 W, Lower Grade 30 W (Determined by control model)	Max. 60 W, Lower Grade 30 W (Determined by control model)	Max. 36 W (Determined by control model)
Video	Stores videos. Storage duration depends on stream bitrate and HDD capacity.	Operating Temperature	-40 °C to +70 °C	-40 °C to +70 °C	-40 °C to +70 °C
Uploading	Automatic Network Replenishment (ANR) and manual uploading	Operating Humidity	10 % ~ 90 %, no condensation	10 % ~ 90 %, no condensation	10% - 90 %, no condensation
Power Supply	12 VDC	Water Proof Rating	IP65	IP65	IP66
Dimension (W × D × H)	245 mm × 170 mm × 55 mm (9.6 × 6.7 × 2.1 inch)	Dimension	322 mm × 270.5 mm × 118 mm (12.68 × 10.65 × 4.65 inch)	322 mm × 270.5 mm × 118 mm (12.68 × 10.65 × 4.65 inch)	128 mm × 216 mm × 159 mm (5.04 × 8.50 × 6.26 inch)
Working Temperature	-30 °C to +70 °C (-220 °F to +158 °F)	Mounting Model	Support front-mounted (bracket rotation angle -90 ° to +90 °)	Support front-mounted (bracket rotation angle -90 ° to +90 °)	Support front-mounted (bracket rotation angle -90 ° to +90 °)
J		Weight	6.28 kg	6.28 kg	2.72 kg
Working Humidity	5 % to 95 %	Wave Length	≥ 850 nm (Infrared)	-	≥ 850 nm (Infrared)

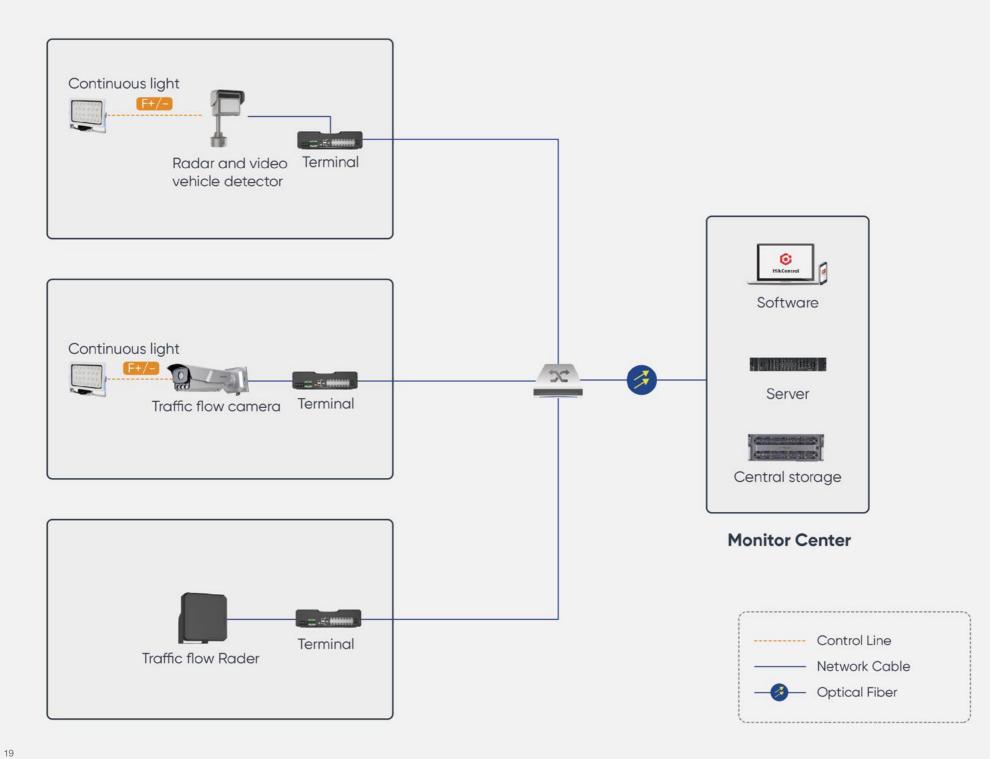


Intelligent Traffic System Traffic Flow Detection System

The Traffic Flow Detection System counts vehicles and provides other traffic-related data. Captured data can be displayed to drivers via traffic guidance screens, as well as for signal control, in order to best guide the traffic and alleviate congestion.

A traffic parameter collection radar is newly released. Compared with cameras, this radar can cover more lanes, track more targets, detect longer distances, and have higher detection accuracy. It can support allweather work, not affected by weather, light, temperature, and other environments.

- > One camera covers 3-4 lanes of traffic flow detection and monitoring
- > Great performance at night
- Easy to install
- Cost-effective
- > Maximized storage space
- Built-in 77 GHz high-frequency radar combined with 4 MP camera, covering 200 meters and supporting 2-lane ANPR with a speed deviation of -4 km/h (iDS-TCD402-BR)
- > System features Lane Flow, Average Vehicle Speed, Lane Traffic Status (Smooth, Slow, Congested), Lane Queue Length, Congestion Level, Time Headway, Space Headway, Time Occupancy, Space Occupancy, Vehicle Type (Large, Small, Motorcycle)
- > Video and image storage up to 24-TB, data retrieval



Traffic Flow Detection Unit

Radar-Assisted Traffic Camera	R	adar-A	ssisted	Traffic	Camera
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Model	iDS-TCD403-BI(G)	Model	iDS-TCD402-CR/12
lmage	Ceep Learning	lmage	Ceep Learning
Light Range	Up to 100 m	Frequency Band	77 GHz
Coverage	Up to 6 lanes	Wave Length	4 mm
Vehicle Counting Accuracy	>95 %	Speed Detection Range	1 to 200 km/h
, , , , , , , , , , , , , , , , , , ,		Min. Illumination	Color: 0.01 Lux @ (F1.2, AGC 0N) B/W: 0.001 Lux @ (F1.2, AGC 0N)
Traffic Data Collection	Traffic flow, speed, status, queue, time headway, space headway, number of parking vehicle in area, space occupancy, time occupancy, etc.	Day/Night Switch	ICR
LED Supplement Lights	Built-in 3 IR supplement lights	Focal Length	12 mm
Camera	4 MP (1/1.8" CMOS), max. 2688 × 1520	Video Compression	H.265/H.264
	50 Hz: 2688 × 1520 @ 25 fps	Max. Resolution	2688 × 1520
Frame Rate	60 Hz: 2688 × 1520 @ 30 fps	Video Frame Rate	25 fps Multiple traffic data output, including lane line, traffic flow, speed, status, queue, time
Video Compression	H.265/H.264	Traffic Data Collection	headway, space headway, number of parking vehicle in area, average delay, space occupancy, time occupancy, etc. Supports real-time display of smart dynamic information.
Standard Protocols	TCP/IP, HTTP, HTTPS, FTP, DNS, RTP, RTSP, RTCP, NTP, IPv6, UDP	Detection Range	200 m coverage in range of the scene
Communication Interface	1 RJ45 10M/1000M/1000M Ethernet interface 1 RS-485 interfaces 1 Wiegand interface	Multi-Target Detection Virtual Coil	Able to track and detect max. 128 targets. Two virtual coils for each lane. Signal output of vehicle entering and exiting virtual coils. Positions of virtual coils are adjustable.
	8-32 mm @ F1.63-1.8	Road Status	Smooth, slow, congested status detection
Lens	Horizontal FOV: 39.7° to 15.9°; Vertical FOV: 22.3° to 9.1°; Diagonal FOV: 45.8° to 18.1°	Network Interface	2, RJ45 100 M/1000 M self-adaptive Ethernet interface
Protection Level	IP67, IK10	Serial Port	1, RS-485 interface 1, RS-232 interface
		Output Interface	1-ch level output
Storage	Built-in microSD/TF card, up to 128 GB	Protection Level	IP66
Operating & Storage Temperature	-30 °C to +70 °C(-22 °F to +158 °F)	Operating & Storage Temperature	-30 °C to +70 °C (-22 °F to +158 °F)
Operating Humidity	95% or less (non-condensing)	Operating & Storage Humidity	<95 % [non-condensing]
Dimensions (W × H × D)	120 × 132.8 × 428.5 mm (4.72 × 5.23 × 16.87 inch)	Dimensions	226 × 206.4 × 375.3 mm (8.9 × 8.1 × 14.8 inch)
Weight	3.12 ± 0.5 kg (6.88 ± 1.1 lb)	Power Supply	24 VAC ± 10 %
Power Supply	12 VDC to 24 VDC ± 20%, PoE (802.3at, class 4), Max. 12 W	Power Consumption	< 15 W
· Swei Suppry	12 400 (0 E + 400 1 E0 /0, 1 0E (00E.001, 0000 F), HOA. 12 W	Weight	3 kg (6.6 lb)

Traffic Flow Radar

Traffic Server

Model	DS-TDSB00-EML	Model	DS-TP50-16E	DS-TP50-08H
lmage		lmage		
Working Frequency Range	60 to 61 GHz	Operating Interface	WEB	WEB
Modulation Waveform	FMCW	HDD Storage	4 x SATA (up to 6TB each HDD)	1 SATA HDD (Up to 4TB)
Frescan Bandwidth	169 MHz@Narrow Beam	External Storage	1 eSATA interface for 1 external HDD	-
	500 MHz@Wide Beam			
Distance Resolution	0.88 m@Narrow Beam		16 x 1000 M Ethernet interface	
	0.3 m@Wide Beam	Network Interface	1 x internal 10/100/1000 M self-adaptive Ethernet interface, 1 x external 10/100/1000 M self-adaptive Ethernet interface 1 x internal 1000 M fiber interface	4 x 100 M self-adaptive Ethernet Interface 2 x 10/100/1000 M self-adaptive Ethernet interface
Distance Measurement Range	350 m@Narrow Beam		1 x internal 1000 M fiber interface 1 x external 1000 M fiber interface	
	100 m@Wide Beam			
Horizontal Viewing Angle	-14.5° ~ +14.5° @Narrow Beam	Video Input	16-ch	4-ch & 4-ch via switches
	-60° - +60° @Wide Beam	Reset Button	1	-
Pitching Viewing Angle	-4.5° - 4.5° @Narrow Beam		4 x indicator (1 x Power Indicator, 1 x	4 x indicator (1 x Power Indicator, 1 x
	-12.6° - 12.6° @Wide Beam	Indicator	Alarm Indicator, 1 x HDD Indicator, 1 x Ready Indicator)	Alarm Indicator, 1 x HDD Indicator, 1 x Ready Indicator)
Angle Resolution (0°)	1.86° @Narrow Beam	USB Port	1	1
	6.23° @Wide Beam	RS232	2	2
Speed Measuring Range	-300 Km/h - 300 Km/h	RS485	2	1
Speed Measuring Error	-2 to 2 km/h	Alarm Input	2	1
Trigger Mode	Approaching, leaving, bidirectional	Alarm Output	2	1
Supported Number of Lane	1 to 8	Operating System	Embedded Linux operating system	Embedded Linux operating system
Supported Number of target	1 to 256	Video	Stores videos. Storage duration depends on stream bitrate and	Stores videos. Storage duration depends on stream bitrate and
Communication Interface	1 RJ45 10 M/100 M self-adaptive Ethernet interface 1 RS-485 interface		HDD capacity.	HDD capacity.
Working Voltage	12 to 24 VDC	Uploading	Automatic Network Replenishment (ANR) and manual uploading	Automatic Network Replenishment (ANR) and manual uploading
Working Current	< 1500 mA	Power Supply	12 VDC/12.5 A	12 VDC
Consumption	< 18 W			
Protection Level	IP67	Dimension (W × D × H)	370 × 273 × 102.5 mm (14.6 × 10.7 × 4.0 inch)	245 mm × 170 mm × 55 mm (9.6 × 6.7 × 2.1 inch)
Weight	1.75 kg	Working Temperature	-40 °C to +70 °C (-40 °F to +158 °F)	-30 °C to +70 °C (-220 °F to +158 °F)
Working Temperature	-40 °C to +70 °C (-40 °F to +158 °F)	Working Humidity	10% to 90%	5% to 95%



Intelligent Traffic System Traffic Signal Control System

Traffic Signal Controllers optimize the order of traffic signals on roadways, adjusting traffic light (red or green) cycle lengths and controlling their operation. The system helps traffic personnel make full use of road resources and alleviate congestion.

Several types of traffic signal lights are newly released, including arrow and disc-shaped lights for motor vehicles, pedestrian traffic lights, and countdown traffic lights.

> Modular design method, easy to install and maintain

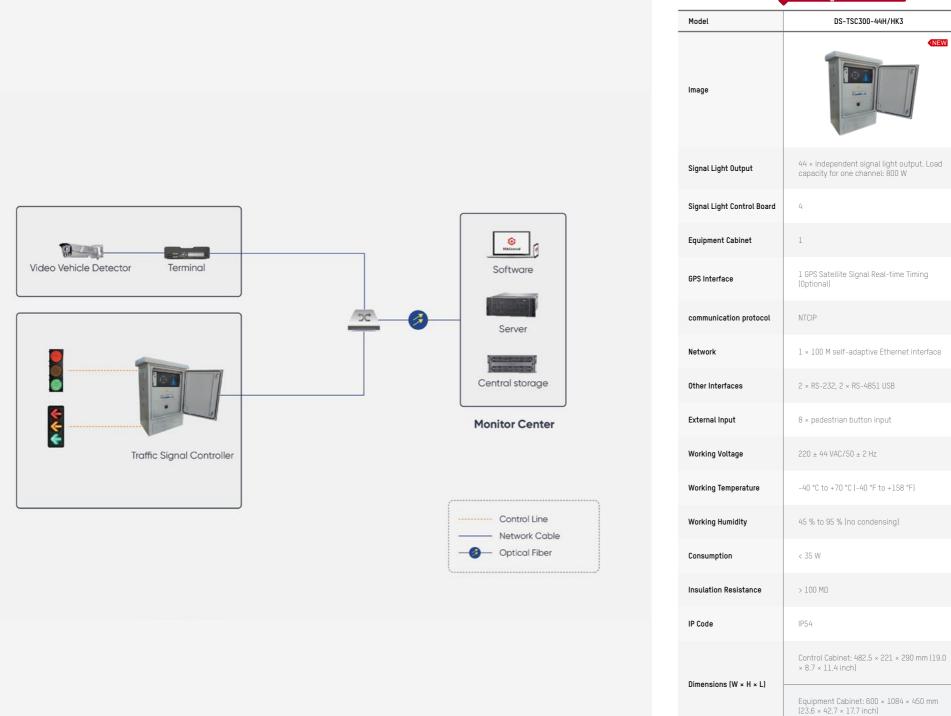
Using open, standard communication protocol, easy to extend

- Equipped with control and display panel, which facilitates real-time > monitoring and manual adjustment of the signal status
- Auto monitor for the status of communication devices and light device, it will alert when problem happens and react automatically
- Equipped with independent yellow flash controller, not controlled by firmware, to enhance the security level
- > GPS Timing

>

Traffic Signal Controller

NEW



23

Signal Light

Digit Distance Digit Width

Model	RX300-3-2010SS-1	RX300-3-3910SS-1	FX300-3-3021SS-1	FX300-3-3022SS-1
lmage				
LED				
LED Diameter	Φ 5 mm (Φ 0.2")	Φ 5 mm (Φ 0.2")	Φ 5 mm (Φ 0.2")	0 5 mm (0 0.2")
Number of LED	Red: 80, green: 90	Red light: 80, green light: 90, red countdown timer: 140, green countdown timer: 168	Red 101, Yellow 101, Green 69	Red 101, Yellow 101, Green 69
	Red: 4500 mcd to 7200 mcd/625 ± 5 nm	Red: 4500 mcd to 7200 mcd/625 ± 5 nm	Red: 4500 mcd to 7200 mcd / 625±5 nm;	Red: 4500 mcd to 7200 mcd/625 ± 5 nm
LED Wave Length	Green: 6000 mcd to 10800 mcd/506 ± 3 nm	Green: 6000 mcd to 10800 mcd/506 ± 3 nm	Yellow: 4500 mcd to 7200 mcd / 592±3 nm;	Yellow: 4500 mcd to 7200 mcd/592 ± 3 nm
	/	/	Green: 6000 mcd to 10800 mcd / 506±3 nm	Green: 6000 mcd to 10800 mcd/506 ± 3 nm
Central Brightness	150 cd to 400 cd	150 cd to 400 cd	5000 cd/m² to 15000 cd/m²	5000 cd/m² to 15000 cd/m²
LED Visual Angle	≥ 30°	≥ 30°	≥ 30°	≥ 30°
LED Visual Distance	≥ 400 m (1312")	≥ 400 m (1312")	≥ 400 m (1312")	≥ 400 m (1312")
LED Service Life	≥ 100,000 h	≥ 100,000 h	≥ 100,000 h	≥ 100,000 h
Appearance and Material				
Shield Diameter	Φ 300 mm (Φ 11.8")	Φ 300 mm (Φ 11.8")	Ф 300 mm	Ф 300 mm
Shield Material	PC	PC	PC	PC
Housing Material	PC + ABS (plastic), surface treatment, black	PC + ABS (plastic), surface treatment, black	PC + ABS (plastic), surface treatment, black	PC + ABS (plastic), surface treatment, black
Traffic Signal Light Pattern	Red pedestrian pattern + static green pedestrian pattern	Red pedestrian pattern + static green pedestrian pattern + 2-digit countdown timer	Left arrow	Straight arrow
Shade Dimension	770 mm × 250 mm (30.3" × 9.8")	770 mm × 250 mm (30.3" × 9.8")	770 mm × 250 mm (30.3" × 9.8")	770 mm × 250 mm (30.3" × 9.8")
Shade Material	Galvanized steel sheet	Galvanized steel sheet	Galvanized steel sheet	Galvanized steel sheet
General				
Working Voltage	176 to 265 VAC, 50 ± 3 Hz	176 to 265 VAC, 50 ± 3 Hz	176 to 265 VAC, 50 ± 3 Hz	176 to 265 VAC, 50 ± 3 Hz
Rated Power	≤ 10 W	≤ 20 W	≤ 15 W	≤ 15 W
Working Temperature	-40 °C to 80 °C (-40 °F to 176 °F)	-40 °C to 80 °C (-40 °F to 176 °F)	-40 °C to 80 °C (-40 °F to 176 °F)	-40 °C to 80 °C (-40 °F to 176 °F)
Working Humidity	10 % to 95 %	10 % to 95 %	10% to 95%	10% to 95%
Storage Environment	0 °C to 50 °C (32 °F to 122 °F), 40 % RH to 60 % RH	0 °C to 50 °C (32 °F to 122 °F), 40 % RH to 60 % RH	0 °C to 50 °C (32 °F to 122 °F), 40% RH to 60% RH	0 °C to 50 °C (32 °F to 122 °F), 40% RH to 60% RH
Insulation Resistance	≥ 500 MΩ	≥ 500 MΩ	≥ 500 MΩ	≥ 500 MΩ
Dielectric Strength	≥ 1500 V	≥1500 V	≥1500 V	≥1500 V
Transformer	24 VAC	24 VAC	24 VAC	24 VAC
Access Interface	220 VAC, live line (red, yellow, and green), zero line	220 VAC, live line (red, yellow, and green), zero line	220 VAC, live line (red, yellow, and green), zero line	220 VAC, live line (red, yellow, and green), zero line
Single-Tube Current	≤ 20 mA	≤ 20 mA	≤ 20 mA	≤ 20 mA
Protection	IP53	IP53	IP53	IP53
Weight	≤ 10 kg (22.1 lb.)	≤ 14 kg (30.9 lb.)	≤ 20 kg (44.09 lb.)	≤ 20 kg (44.09 lb.)
Timer				
Timer Mode	/	Learning/trigger/RS-485 communication	/	/
Display Value	/	/	/	/
Digit Dimension	/	/	/	/

Model	FX300-3-3023SS-1	JD300-3-301SS-1	DX-3-T-1-80607S11-1
Image			
LED			
LED Diameter	Φ 5 mm (Φ 0.2")	Φ 5 mm (Φ 0.2")	Φ 5 mm (Φ 0.2")
Number of LED	Red 101, Yellow 101, Green 69	Red 149, Yellow 149, Green 97	Red: 406, green: 406, yellow: 280
	Red: 4500 mcd to 7200 mcd/625 ± 5 nm	Red: 4500 mcd to 7200 mcd/625 ± 5 nm	Red: 628 nm ± 1 nm
LED Wave Length	Yellow: 4500 mcd to 7200 mcd/592 ± 3 nm	Yellow: 4500 mcd to 7200 mcd/592 ± 3 nm	yellow: 590 nm ± 1 nm
-	Green: 6000 mcd to 10800 mcd/506 ± 3 nm	Green: 6000 mcd to 10800 mcd/506 ± 3 nm	green: 505 nm ± 1 nm
Central Brightness	5000 cd/m² to 15000 cd/m²	5000 cd/m² to 15000 cd/m²	5000 cd/m² to 15000 cd/m²
LED Visual Angle	≥ 30°	≥ 30°	≥ 30°
LED Visual Distance	≥ 400 m (1312")	≥ 400 m (1312")	≥ 400 m (1312")
LED Service Life	≥ 100,000 h	≥ 100,000 h	≥ 100,000 h
Appearance and Material			
Shield Diameter	Ф 300 mm	Φ 400 mm (Φ 15.8")	/
Shield Material	PC	PC	PC
Housing Material	PC + ABS (plastic), surface treatment, black	PC + ABS (plastic), surface treatment, black	PC + ABS (plastic), surface treatment, black
Traffic Signal Light Pattern	Right arrow	Round signal light	
Shade Dimension	770 mm × 250 mm (30.3" × 9.8")	770 mm × 250 mm (30.3" × 9.8")	750 mm × 240 mm (29.5" × 9.4"), 460 mm × 240 mm (18.1" × 9.4")
Shade Material	Galvanized steel sheet	Galvanized steel sheet	Galvanized steel sheet
General			
Working Voltage	176 to 265 VAC, 50 ± 3 Hz	176 to 265 VAC, 50 ± 3 Hz	176 to 265 VAC, 50 ± 3 Hz
Rated Power	≤ 15 W	≤ 15 W	≤ 25 W
Working Temperature	-40 °C to 80 °C (-40 °F to 176 °F)	-40 °C to 80 °C (-40 °F to 176 °F)	-40 °C to 80 °C (-40 °F to 176 °F)
Working Humidity	10% to 95%	10% to 95%	10 % to 95 %
Storage Environment	0 °C to 50 °C (32 °F to 122 °F), 40% RH to 60% RH	0 °C to 50 °C (32 °F to 122 °F), 40% RH to 60% RH	0 °C to 50 °C (32 °F to 122 °F), 40 % RH to 60 % RH
Insulation Resistance	≥ 500 MΩ	≥ 500 MΩ	≥ 500 MΩ
Dielectric Strength	≥1500 V	≥ 1500 V	≥ 1500 V
Transformer	24 VAC	24 VAC	
Access Interface	220 VAC, live line (red, yellow, and green), zero line	220 VAC, live line (red, yellow, and green), zero line	220 VAC, left red, left yellow, left green, straight red, straight yellow, and zero line
Single-Tube Current	≤ 20 mA	≤ 20 mA	≤ 20 mA
Protection	IP53	IP53	IP53
Weight	≤ 20 kg (44.09 lb.)	≤ 20 kg (44.09 lb.)	≤ 14 kg (30.9 lb.)
Timer		1	
Timer Mode	/	/	Follow/trigger/RS-485 communication
Display Value	/	/	Red: 99 to 1, green: 99 to 1, yellow: 9 to 1
Digit Dimension	/	/	520 mm × 280 mm (20.5" × 11.0")
Digit Distance	/	/	115 mm (4.5")
Digit Width			46 mm (1.8")



Intelligent Traffic System

Automatic Incident Detection System

Hikvision's Traffic Incident Detection system is an early warning system for collecting evidence around incidents and parameters that affect vehicles and traffic safety on the road. It's the best tool to ensure safety and promote an efficient traffic flow.

All-rounder traffic incident detection camera supports front-end detection of multiple incidents, including fallen objects, pedestrians, illegal parking, road construction, congestion, weaving out of the lane, fire detection(Thermal Lens) etc. Also, it supports multiple traffic parameter collection: vehicle type, lane flow, lane speed, queuing length, traffic status, etc.

Except all-rounder traffic incident detection camera, Hikvision has Traffic Incident Detection server that can access to IP cameras and speed domes to detect traffic incidents and collect traffic parameters simultaneously. Individuals on the road, such as motorists, can be warned via various message signs. Emergency services, if needed, will also be informed in time. This product can be deployed for traffic managements on accidentprone roads, tunnels and oversize bridges.

- Deep Learning technology enables high-performance traffic incident detection
- Simple configuration and operation sets you free from complex external operating systems
- High-performance on simultaneous monitoring of traffic flow and traffic incident detection
- Traffic Incident Detection server supports 4-ch or 16-ch 4 MP traffic cameras or IPCs for video analysis
- Pedestrian, Bicycle Riding, Wrong-Way Driving, Vehicle Breakdown, Objects Dropped Down, Sudden Speed Decrease, Low Speed Driving, High Speed Driving, Illegal Parking, Driving On The Lane Line, Construction, Objects Dropped Down, Emergency Lane Occupation, fire detection, Congestion, Lane Traffic Flow

Traffic incident unit

Model	iDS-TCS800-C	iDS-TCS800-CI
lmage		
	(Deep Learning)	(Deep Learning)
Image Sensor	1/1.2" CMOS	1/1.2" CMOS
Resolution	3840 × 2160	3840 × 2160
Video Compression	H.265/H.264/MJPEG	H.265/H.264/MJPEG
Focal Length & FOV	15-50 mm; Horizontal: 42.7° to 13.7°, vertical: 23.4° to 7.6°, diagonal: 49.7 to 15.8°	15-50 mm; Horizontal: 42.7° to 13.7°, vertical: 23.4° to 7.6°, diagonal: 49.7 to 15.8°
Light Beads	16	16
Wavelength	/	850 nm
Coverage	2-3 lanes	2-3 lanes
Smart Function	Supports detection of driving on lane line, illegal lane change, wrong-way driving, illegal parking, lane occupied by large truck, roadblock, construction, dropping objects, pedestrians, congestion, vehicle type, lane flow, lane speed, space headway, time headway, lane time occupancy rate, lane space occupancy rate, queuing length, and traffic status, etc.	Supports detection of driving on lane line, illegal lane change, wrong-way driving, illegal parking, lane occupied by large truck, roadblock, construction, dropping objects, pedestrians, congestion, vehicle type, lane flow, lane speed, space headway, time headway, lane time occupancy rate, lane space occupancy rate, queuing length, and traffic status, etc.
Protocols	TCP/IP, HTTP, DNS, RTP, RTSP	TCP/IP, HTTP, DNS, RTP, RTSP
Frame Rate	50 Hz: 25 fps 60 Hz: 30 fps	50 Hz: 25 fps 60 Hz: 30 fps
Protection Level	IP66	IP66
Interface	1 RJ45 10 M/100 M/1000 M self-adaptive Ethernet interface; 1 1000 M fiber interface; 1 RS-485 interface	1 RJ45 10 M/100 M/1000 M self-adaptive Ethernet interface; 1 1000 M fiber interface; 1 RS-485 interface
Local Storage	TF card, up to 128 GB	TF card, up to 128 GB
Weight	Approx. 6.5 ± 0.5 kg (14.3 ± 1.1 lb.)	Approx. 6.5 ± 0.5 kg (14.3 ± 1.1 lb.)
Dimensions (W × H × D)	175.7 × 141.1 × 500.5 mm (6.9" × 5.6" × 19.7")	175.7 × 141.1 × 500.5 mm (6.9" × 5.6" × 19.7")
Operating Temperature	-30 °C to 70 °C (-22 °F to 158 °F)	-30 °C to 70 °C (-22 °F to 158 °F)
Humidity	95 % or less, non-condensing	95 % or less, non-condensing
Power	24 VDC ± 20 %, PoE (802.3at, class 4), 24 W MAX	24 VDC ± 20 %, PoE (802.3at, class 4), 24 W MAX

All-Rounder Traffic Incident Detection Camera

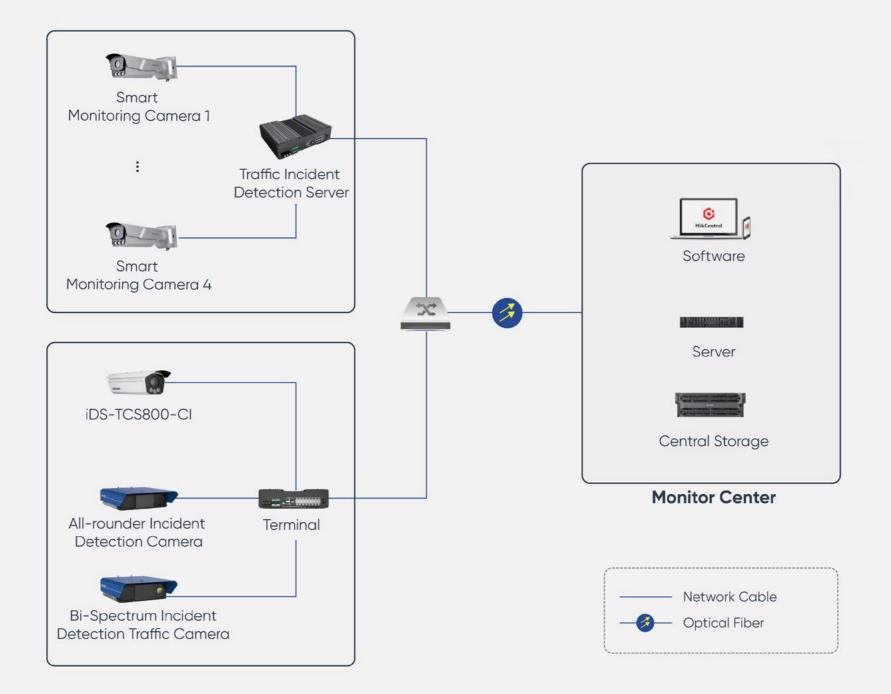
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Model	iDS-TCS907-CER	iDS-TCS907-CIR
Image	(Deep Learning)	HOT Ceep Learning
Image Sensor	2/3" GMOS	2/3" GMOS
Resolution	4096 × 2160	4096 × 2160
Video Compression	H.265/H.264/MJPEG	H.265/H.264/MJPEG
Focal Length & FOV	11- 40 mm; Horizontal: 62° to 23.6°, vertical: 32.2° to 12.2°	11- 40 mm; Horizontal: 62° to 23.6°, vertical: 32.2° to 12.2°
Light Beads	16	16
Wavelength	/	850 nm
Coverage	2-3 lanes	2-3 lanes
Smart Function	Supports detection of phone calling, non- seatbelt, driving on lane line, illegal lane change, wrong-way driving, illegal parking, lane occupied by large truck, roadblock, construction, dropping objects, pedestrians, congestion, etc.	Supports detection of phone calling, non- seatbelt, driving on lane line, illegal lane change, wrong-way driving, illegal parking, lane occupied by large truck, roadblock, construction, dropping objects, pedestrians, congestion, etc.
Protocols	TCP/IP, HTTP, DNS, RTP, RTSP	TCP/IP, HTTP, DNS, RTP, RTSP
Frame Rate	50 Hz: 25 fps; 60 Hz: 30 fps	50 Hz: 25 fps; 60 Hz: 30 fps
Protection Level	IP54	IP54
Interface	2 RJ45 10 M/100 M/1000 M self-adaptive Ethernet interfaces; 3 RS-485 interfaces, 1 RS-232 interface	2 RJ45 10 M/100 M/1000 M self-adaptive Ethernet interfaces; 3 RS-485 interfaces, 1 RS-232 interface
Local Storage	TF card, up to 128 GB	TF card, up to 128 GB
Weight	7 ± 0.5 kg (15.4 ± 1.1 lb)	7 ± 0.5 kg (15.4 ± 1.1 lb)
Dimensions (W × H × D)	With package: 375 × 372 × 141 mm (14.8 × 14.6 × 5.6 inch)	With package: 375 × 372 × 141 mm (14.8 × 14.6 × 5.6 inch)
Operating Temperature	-30 °C to 70 °C (-22 °F to 158 °F)	-30 °C to 70 °C (-22 °F to 158 °F)
Humidity	9 5% or less, non-condensing	95 % or less, non-condensing
Power	100 to 240 VAC 80 W MAX	100 to 240 VAC 80 W MAX

BI-Spectrum Incidente Traffic C

AID Server

Model	iDS-TCS817-CR	Model	iDS-TSS300-C/04	iDS-TSS500-C/16
Image	(Deep Learning)	lmage	(Deep Learning)	(Deep Learning)
Optical				
Image Sensor	8 MP (1/1.2" GMOS)	Operating Interface	WEB	VGA
Min. Illumination	Color: 0.001 Lux@(F1.4, AGC 0N) , 0.0005 Lux with IR	HDD Storage	Up to 4 × 3.5-inch SATA HDD, 24 TB	_
Focal Length & FOV	15- 50 mm; Horizontal: 42.7° to 13.7°, Vertical: 23.4° to 7.6° 5.7-21 mm Horizontal: 106.5° to 33.1°, Vertical: 60.2° to 18.7°	Network Interface	NIC 1: 9 × Gigabit Ethernet interface, 1 × combo SFP Gigabit fiber optic interface NIC 2: 1 × Gigabit Ethernet interface, 1 × SFP Gigabit fiber optic interface	4-ch self-adaptive 10/100/1000 M network interfaces
Thermal				
Resolution	640 x 512	Alarm Input	2	_
Focal Length	10 mm, 15 mm, 25 mm, 50 mm			
Radar		Alarm Output	2	-
Frequency	77 Ghz			
Measurment Range	2 to 200 km/h	Video Input	Up to 4-ch 4 MP IP cameras connection	Up to 16-ch 2 MP/3 MP IP cameras connection
Measurement Accuracy	±2 km/h			
Coverage	Up to 3 lanes	USB Port	1 × USB 3.0	4 × USB 3.0, 2 × USB 2.0
General				
Video Compression	H.265/H.264/MJPEG	RS232	2	-
Smart Function	Vehicle type, lane flow, lane speed, space headway, time headway, lane time occupancy rate, lane space occupancy rate, queuing length, and traffic status Driving on lane line, lane change, wrong-way driving, stopped vehicle, Emergency lane occupation, roadblock, construction, fallen object, pedestrians,	RS485	2	-
	congestion, fire/smoke in tunnel detection, Speed drop, speeding, low-speed driving	HDMI/VGA Port	-	1 VGA
Protocols	TCP/IP, HTTP, HTTPS, FTP, DNS, RTP, RTSP, RTCP, NTP, IPv6, UDP	Memory	-	2 × 4 G Memory Bank
Frame Rate	50 Hz: 25 fps 60 Hz: 30 fps	Display Lamp	Power Indicator, alarm status indicator, HDD indicator, running status indicator	UID Lamp, Alarm Lamp, Power Lamp, Ready Lamp
Protection Level	IP54			
Interface	1 RJ45 10 M/100 M/1000 M self-adaptive Ethernet interface 1 RS-485 interface, 6 Alarm Output	Кеу	Power on/off, Reset	Power on/off, Reset
Local Storage	Built-in micro SD/TF card, up to 128 GB	Power	Max. 70 W	Hot Spare, Efficient, 1+1 Redundant, 800 W
GPS	Optional			
Temperature Sensor	Optiona;	Dimension	370 mm × 273 mm × 102.5 mm (14.57 inch × 10.75 inch × 4.04 inch)	438.4 × 591 × 43.6 mm (17.3 × 23.3 × 1.7 inch)
Weight	7.2 ± 0.5 kg (15.9 ± 1.1 lb)			
Dimensions (W × H × D)	437 × 391 × 139.65 mm (17.2 × 15.39 × 5.50 inch)	Operating Temperature	-30 °C to 70 °C (86 °F to 158 °F)	-40 °C to 70 °C (-40 °F to +158 °F)
Operating Temperature	-30 °C to 70 °C (-22 °F to 158 °F)			
Humidity	95 % or less, non-condensing	Operating Humidity	10 % to 90 %	5 % to 95 %
Power	100 to 240 VAC (with power adapter, by default) 36 VDC ± 20 % (without power adapter) 70 W MAX	Weight	_	16 kg (35.3 lb)



Intelligent Traffic System **Axle Counting Camera**

Axle Counting camera can be used at Highway Toll station to obtain the multiple attributes of vehicles to improve the efficiency and accuracy of vehicle classification. With Built-in Triple-lens, it can recognize the number of vehicle axles and tires based on the video detection, capture and output the complete side view picture of the vehicle with extra long body. It also supports vehicle head and tail capture with LPR and vehicle features information.

- > Built-in triple-lens camera with 4 MP CMOS sensor
- > Smart stitching complete side view picture of the vehicle
- > Vehicles capture, LPR and vehicle features recognition (main brand, sub-brand, and color)
- > Adjustable built-in 3 group white LED supplement



Axle Counting Camera

Model	iDS-TCH44P-B	
lmage	(Deep Learning)	
Image Sensor	4 MP (1/1.8" CMOS) × 3	
Resolution	2688 × 1520. No limit on the width of combined vehicle body pictures.	
HVideo Compression	H.264/H.265	
Focal Length & FOV	LeftS Right: 4 to 100mm vari-focal Vertical F0V: 59.4 to 23.6 Diagonal 144.5 to 48.1 Middle: 3.2mm fixed lens Horizontal F0V: 136, Vertical: 73, Diaonal : 156	
Protocols	TCP/IP, HTTP, HTTPS, FTP, DNS, RTP, RTSP, RTCP, NTP, IPv6, UDP	
API	ISAPI, SDK	
Interface	1 RJ45 10 M/100 M/1000 M self-adaptive Ethernet interface 1 RS-485 Interface 2 X IO interface	
Sotrage	Built-in microSD/TF card, up to 128 GB	
Smart Function	License plate recognition, vehicle axles and tyres number recognition, and vehicle features recognition	
Frame Rate	50 HZ: 25 fps/60 Hz: 30 fps	
Weight	19 ± 0.5 kg (41.8 ± 1.1 lb.)	
Dimensions (W × H × D)	With package: 1925 mm × 410 mm × 370 mm (75.7" × 16.14" × 14.56")	
Operating Condition	Temperature: -30 °C to 70 °C (-22 °F to 158 °F) Humidity: 95 % or less (non-condensing)	
Power 100 to 240 VAC		

Intelligent Traffic System Specific Application Radar Sensors

Specific Application Radar Sensors (Auxiliary Care Radar and Fall Detection Radar) can detect real-time breath rate, heart rate of the human body and can obtain target information such as person location, speed posture, etc. By non-video privacy protection and non- contact detection, data can be transmitted to the monitoring center via Wi-Fi. Securing those in deed with responsive contactless care.

- > Non-contact detection
- > No Privacy Disclosure
- > Radar Working Frequency 60 to 64GHz
- > On-bed / Out-of-bed detection
- > Breath rate and heart rates of human body
- > Body Movement Information
- > Get-up Detection & Fall Detection



Vital Sign Detection Radar

Model	DS-TDSB00-EKH/POE/2m
lmage	
Working Frequency	60 to 64 GHz
Modulation Wave	FMCW
Radiation	<10dbm
Detection Range	0.1 to 2.7 m
Range Resolution	0.0435 m
Breath/Heart Rate Resolution	0.08 Hz
Data Cycle	200 ms
Communication Interface	RJ45, WIFI
Working Voltage	Type-C DC5V, IEEE 802.3af POE
Working Electric Current	≤ 200 mA @ 12 VDC
Working Temperature	-40 °C to 70 °C (-40 °F to 158 °F)
Weight	125 g

Fall Detection Radar

Model	DS-TDSB00-EKT/POE/4M
lmage	THE W
Working Frequency	60 to 64 GHz
Modulation Wave	FMCW
Radiation	<10dbm
Detection Range	4m
Data Cycle	70ms
Communication Interface	RJ45 , WIFI
Working Voltage	Type-C DC5V, IEEE 802.3af POE
Working Electric Current	≤ 200 mA @ 12 VDC
Working Temperature	-40 °C to 70 °C (-40 °F to 158 °F)
Weight	125 g

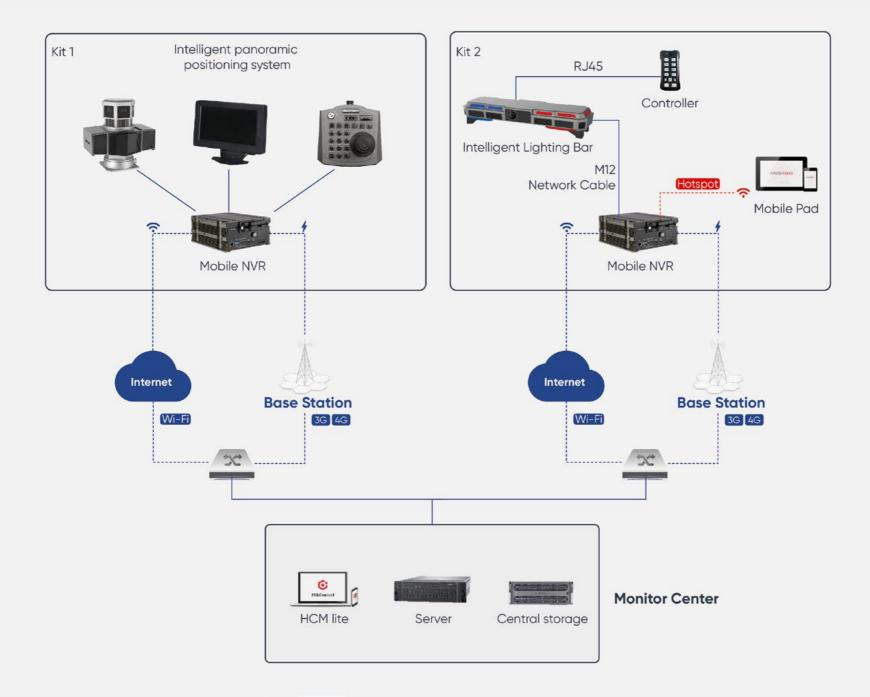


Intelligent Traffic System Mobile Enforcement System

Mobile enforcement system adopts multiple key technologies. The whole system is composed of mobile enforcement video recorder, positioning system, manual controller, and LCD screen. Mobile enforcement system provides a complete solution for the traffic law enforcement, security protection, emergency commanding, and other monitoring projects. It is widely applied to the police vans, special vehicles, emergency scenes and etc.

A road maintenance system is newly released, which can support six types of road diseases detection under 100km/h vehicle speed, and it can cover up to 3 lanes.

- > The system supports 1-ch positioning system and 4-ch network cameras
- > Positioning system provides 360° panoramic view which is composed of two 180° view pictures with each spliced by 3 cameras covering front and rear view of vehicle
- Supports LPR recognition, illegal parking capture, road diseases detection (for road maintenance system)
- Pluggable 3G/4G module and Wi-Fi module providing flexible data transmission solutions
- Built-in GPS module precisely positioning the vehicle via the satellite and recording the location information in the video stream
- > Device adopts the aviation plug design to ensure signal stability
- > Aluminum die-cast chassis with no-fan design well adaptable to working environment.



	Mobile Enforcement System		Panoramic Positioning System	Road Maintenance Panoramic Positioning Sy	vstem	
Model	DS-MI9605-Q36	Model	ids-tcc246-c-wgi/4m/5	iDS-TCC246-C-WGI/DLYH/4M/5	Model	DS-MP1308
mage		lmage			lmage	
Video input	1-ch PTZ Camer (Aviation) 4-ch IP cameras (Aviation)	PTZ		Screen	Multi-touch 7-inch	
wo-way audio	1-ch, G.722	Imange Sensor	1/1.8" Progressive Scan CMOS	1/1.8" Progressive Scan CMOS	Screen Resolution	1280 × 800 RGB
	1-ch CVBS output	Resolution	50 Hz: 25 fps (2560 x 1544/1920 x 1080) 60 Hz: 30 fps (2560 x 1544/1920 x 1080)	50 Hz: 25 fps (2560 x 1544/1920 x 1080) 60 Hz: 30 fps (2560 x 1544/1920 x 1080)		1200 - 000 1100
ideo output	1-ch VGA output 1-ch HDMI output	Focal Length	5.9 to 135.7 mm, 23x optical zoom	5.9 to 135.7 mm, 23x optical zoom	Material	TFT
deo		Zoom Speed	4.8 s (optical, wide-tele)	4.8 s (optical, wide-tele)	Backlight Mode	LED Backlight
ompression	H.264, H.265	Rotation Angle	Horizontal: 360° unlimited; Vertical: -90° to 90°	Horizontal: 360° unlimited; Vertical: -90° to 90°		
ax resolution	Main stream: 1080 P Sub-Stream: 4 CIF	Preset Speed	Horizontal: 100°/s; Vertical: 80°/s	Horizontal: 100°/s; Vertical: 80°/s	Consumption	≤ 5 W
rame rate	PAL: 1 to 25 fps;	DNR	3D DNR	3D DNR	Working Voltage	12 V
rame rate	NTSC: 1 to 30 fps	WDR	Supported	Supported	Working Temperature	-20 °C to +60 °C (-4 °F to +140 °F)
HDD/SSD	1 × 2.5 inch HDD/SSD. Up to 2 TB for each HDD/SSD 1 × SD card (stores data when HDDs/SSDs	Picture Configuration	Brightness, contrast, sharpness, saturation	Brightness, contrast, sharpness, saturation	working reinperature	
		Digital Zoom	12	12	Working Humidity	10 % to 95 %
	are damaged)	Manual Control of	Horizontal: 0 to 60°/s; Vertical: 0 to 40°/s	Horizontal: 0 to 60°/s; Vertical: 0 to 40°/s	Weight	0.6 kg (1.3 lb)
G/4G dialing	3G/4G (optional)	Speed Number of Preset	256	256		
/i-Fi	2.4 GHz	Number of Patrol	8	8	Dimension(W × D × H)	192.38 x 24.5 x 120.88 mm
NSS (Global avigation	GPS/GLONASS	Panoramic				
Satellite System) Network	Front panel: 1 × 10 M/100 M/1000 M Ethernet interface Rear panel: 4 × (4 -pin 10 M/100 M aviation plug. 1 × 2-pin power supply)	Image Sensor	6 x 1/1.8" Progressive Scan CMOS	6 x 1/1.8" Progressive Scan CMOS	Model	DS-MP1010K
		Resolution	2688x1520 / 7256x1520 (Splicing)	2688x1520 / 7256x1520 (Splicing)		
nterface		Focal Length	5 mm	5 mm	Image	
erial port	1 × RS-232	3D Positioning	Supports 3D positioning linkage in panoramic	Supports 3D positioning linkage in panoramic		
ond port	Front panel: 2 × USB 3.0.	General	view view		Image	
SB interface	Rear panel: 1 × USB 2.0 of 5-pin aviation	Bitrate	32 Kbps-12 Mbps	32 Kbps to 12 Mbps		
	plug	Security	Password protection, multi-user access control	Password protection, multi-user access control		
larm input	8 high/low level signal inputs	Mechanism Image	H.264/H.265	H.264/H.265	Switch	1 metal power lock
ower supply	9 to 32 VDC	Compression Protocols	TCP/IP, HTTP, DHCP, DNS, DDNS, RTP, RTSP, SMTP,	TCP/IP, HTTP, DHCP, DNS, DDNS, RTP, RTSP, SMTP,	Button	20 physical buttons with backlight
Consumption	Standby: ≤ 0.5 W Full (bad: ≤ 99 W Note:Without peripheral and storage media ≤ 20 W		NTP, UPnP, SNMP, FTP, 802.1x, QoS, HTTPS	NTP, UPnP, SNMP, FTP, 802.1x, QoS, HTTPS	button	20 physical buttons with backlight
		Network Interface	1 RJ45 10M/100M Ethernet interface, supporting remote upgrade	1 RJ45 10M/100M Ethernet interface, supporting remote upgrade	Interface	1 RS-485 interface
Working temperature	Device of which the dummy HDD with heating function: -30 °C to +60 °C (-22 °F to +140 °F) Other devices:	Power Supply	8 to 36 VDC	8 to 36 VDC	Vibration	Vibration damping design
		Protection Level	IP66	IP66		1 0 0
		Working Temperature	-35 °C to +55 °C (-31 °F to +131 °F)	-35 °C to +55 °C (-31 °F to +131 °F)	Consumption	≤ 2 W
	-10 °C to +60 °C (14 °F to 140°F)	Consumption	Max. < 85 W (Supplement light enabled)	Max. < 85 W (Supplement light enabled)	Weight	0.5 kg (1.1 lb)
/orking humidity 	10 % to 90 %	Working Humidity	< 90 %	< 90 %		Ŭ
limensions W × D × H)	205 × 256 × 102.3 mm (8.1 × 10.1 × 4.0 inch)	Weight	12 kg (26.5 lb)	12 kg (26.5 lb)	Dimension(W × D × H)	143 × 135 × 40.4 mm (5.6 × 5.3 × 1.6 inch)

Panoramic Positioning System

Road Maintenance Panoramic Positioning System

Mohile Enforcement System

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Model	DS-MDP002	Model	IDS-TVJ860-IR
lmage		Image	
Image Sensor	Front 8 megapixel camera, 13 megapixel rear camera	Sensor	Left Camera and Right Cameras: Adopts 1/3"" CMOS, Resolution: 2688 (H) × 1944(V), Frame Rate: 25 fps. Front Camera and Rear Camera: Adopts 1/1.8"" CMOS, Resolution: 3840 (H) × 2160 (V), Frame Rate: 25 fps.
Screen Size	8 inch	Resolution	Left Camera and Right Camera: 4 mm Front Camera and Rear Camera: 8 mm
Resolution	1920 × 1200	Focal Length	Left Camera and Right Camera: 4 mm Front Camera and Rear Camera: 8 mm
Wireless Network	46: FDD -LTE B1, FDD -LTE B3, FDD -LTE B7, FDD -LTE B8, FDD -LTE B20 Wi-Fi 802.11b, 802.11g, 802.11n	FOV	Left Camera and Right Camera: Horizontal FOV 43.7°, Vertical FOV: 79.6°, Diagonal FOV:93.8° Front Camera and Rear Camera: Horizontal FOV: 20.9°, Vertical FOV: 37.3°, Diagonal FOV:42.8°
Operating System	Android 9.0	Aperture	Left Camera and Right Camera: F2.0 Front Camera and Rear Camera: F1.7
Button	0n/Off, volume +, volume -, Scan	Built-in Supplement Light Type	IR light
Package Dimension	251 mm × 152mm × 15mm (9.9 × 6.0 × 0.6 inch)	Working Frequency	77 GHz
Ingress Protection	IP65	Speed Range	10 km/h to 300 km/h
Drop Protection Performance	Drop it twice for each side (6 sides in total) from the height of 1.2 m on the cement	Horizontal Detection Angle	± 60°
Power Supply Mode	ground. Battery power supply	Distance Measurement Accuracy	± 150 m
		Smart Function	License Plate Recognition, Radar Speed Detection, Facial Recognition
Working Temperature	-20 °C to 50 °C (-4 °F to 122 °F)	Protocols	TCP/IP, HTTP, ISUP, FTP, NTP, UDP
Working Humidity	≤ 90%	API	ISAPI, SDK, ISUP
Wireless Network	Bluetooth, Wi-Fi Protocol, NFC	Built-in LED	Supported
IR	Not supported	Network Interface	Switch: 1 gigabit Ethernet port
White Light	Supported	Protection Level	1P65
Storage	TF Card, Max. 256 GB	Dimension	1203.4 mm (W) × 232 mm (H) × 360 mm (D)
Peripheral Device Interface	Type-C,USB 2.0, Loudspeaker, MIC	Power Supply	9 VDC to 15 VDC
		Weight	Approx. 32.87 kg (72.5 lb.) (without package)
Battery Capacity	8000 mAh	Power Consumption	180 W
Product Weight	700 g (1.5 lb.)	Operating Condition	-30 °C to +70 °C (-22 °F to +158 °F). Humidity 95% or less (non-condensing



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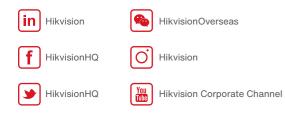


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