PRODUCT QUICK GUIDE

INTELLIGENT TRAFFIC SYSTEM

January-June 2023

HIKVISION®

Intelligent Traffic System

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

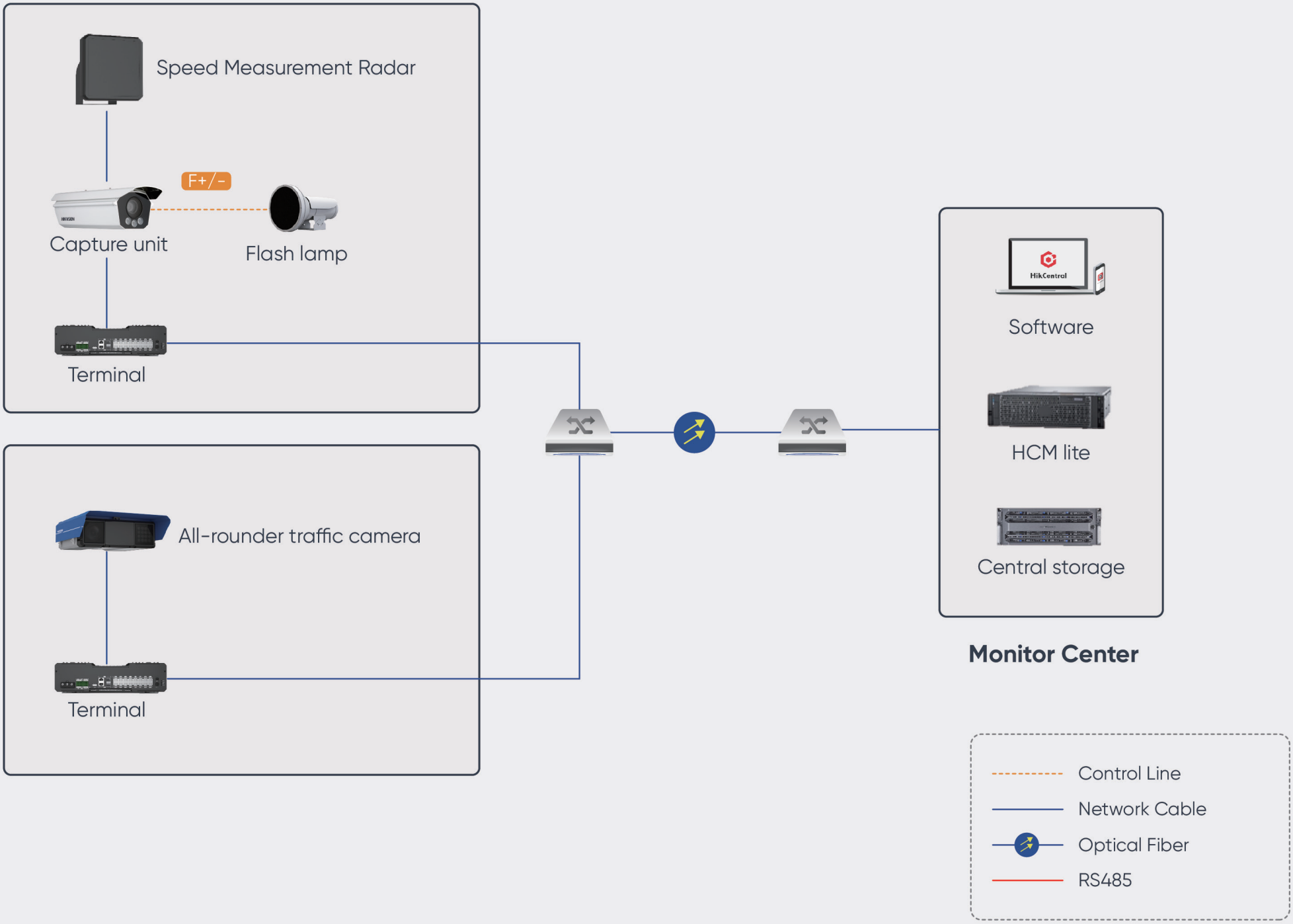
The checkpoint capture system is designed for applications in urban roads and expressways. When a vehicle passes by, information such as the license plate, type, color, and radar-detected speed will be collected and utilized by our professional video management platform for further applications, such 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
Image	HOT  Deep Learning	HOT  Deep Learning	HOT  Deep Learning	HOT  Deep Learning
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	Up to 40 m	Up to 40 m	Up to 40 m
Light Beads	16	16	16	16
Wavelength	850 nm	850 nm	-	-
Central Frequency	24.05 to 24.25 GHz	24.05 to 24.25 GHz	24.05 to 24.25 GHz	24.05 to 24.25 GHz
Measurement Accuracy	-2 to +2 km/h	-2 to +2 km/h	-2 to +2 km/h	-2 to +2 km/h
Velocity Range	10 to 320 km/h	10 to 320 km/h	10 to 320 km/h	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	Approaching direction, leaving direction, and both	Approaching direction, leaving direction, and both	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	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
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)	Support (with flash light)	Support (with flash light)	Support (with flash light)
Phone Call Detection	Support (with flash light)	Support (with flash light)	Support (with flash light)	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	TF card, up to 128 GB	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.)	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)	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	95 % or less, non-condensing	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	36 VDC ± 20 % / 100 to 240 VAC	36 VDC ± 20 % / 100 to 240 VAC


Speed Measurement Radar
F+/-
Capture unit
Flash lamp
Terminal
All-rounder traffic camera
Terminal
HikCentral
Software
HCM lite
Central storage
Monitor Center
Control Line
Network Cable
Optical Fiber
RS485

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)
Image	HOT  Deep Learning	HOT  Deep Learning	HOT  Deep Learning	HOT  Deep Learning	NEW  Deep 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)	Support (only strobe light mode)	Support (only strobe light mode)	Support (only strobe light mode)	Support (only strobe light mode)
Illegal Lane Change Detection	Support (only strobe light mode)	Support (only strobe light mode)	Support (only strobe light mode)	Support (only strobe light mode)	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)	Support (with flash light)	Support (with flash light)	Support (with flash light)	Support (with flash light)
Phone Call Detection	Support (with flash light)	Support (with flash light)	Support (with flash light)	Support (with flash light)	Support (with flash light)
Capture Speed Range	10 to 320km/h	10 to 320km/h	10 to 320km/h	10 to 320km/h	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	TF card, up to 128 GB	TF card, up to 128 GB	TF card, up to 128 GB	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	95 % or less, non-condensing	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
Image	NEW  Deep Learning	NEW  Deep Learning
Image Sensor	1.1" GMOS	1.1" GMOS
Resolution	5120 × 4000	5120 × 4000
Video Compression	H.265/H.264/MJPEG	H.265/H.264/MJPEG
Lens	11-40mm	11-40mm
Light Range	Up to 30 m	Up to 30 m
Coverage	4-5 lanes	4-5 lanes
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 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
Driving on Lane Line Detection	Support (only strobe light mode)	Support (only strobe light mode)
Illegal Lane Change Detection	Support (only strobe light mode)	Support (only strobe light mode)
Wrong-Way Driving Detection	Support	Support
Emergency Lane Occupation	Support (truck forbidden lane, emergency lane, urban bus lane)	Support (truck forbidden lane, emergency lane, urban bus lane)
Seatbelt Detection	Support (with flash light)	Support (with flash light)
Phone Call Detection	Support (with flash light)	Support (with flash light)
Capture Speed Range	5 to 250 km/h	5 to 250 km/h
Frame Rate	50 Hz: 25 fps 60 Hz: 30 fps	50 Hz: 25 fps 60 Hz: 30 fps
Protection Level	IP66	IP66
Local Storage	TF card, up to 128 GB	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)	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)
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

Traffic Server

Model	DS-TP50-16E	DS-TP50-08H
Image	HOT 	NEW 
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
Image	
Operating Interface	WEB
HDD Storage	1 × 4 TB 3.5-inch SATA HDD (Default); 4 × 6 TB (Scalable)
Network Interface	Dual NIC design 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
Video Input	12-ch
USB Port	1
RS232	2
RS485	2
Display Lamp	Power indicator, alarm status indicator, HDD indicator, running status indicator
Operating System	Embedded Linux Operating System
Upload Function	Supports transportation data ANR andmanual re-uploading.
Key	Power on/off, Reset
Power	12 VDC/12.5 A, 150 W
Dimension	370 mm × 273 mm × 102.5 mm (14.57 inch × 10.75 inch × 4.04 inch)
Operating Temperature	-30 °C to 70 °C (-86 °F to 158 °F)
Operating Humidity	10 % to 90 %

Radar

Model	DS-TD10N-1	DS-TD10M-1	TSDB00-EMM
Image			
Power Supply	9 -12 VDC	9 -12 VDC	12 to 24 VDC
Central Frequency	24.15 GHz	24.15 GHz	60 to 61 GHz
Modulation Waveform	CW	FMCW	FMCW
Center Frequency Deviation	≤ ±45 MHz	≤ ±45 MHz	-
Antenna Beam Width	6 ° × 6 °	35 ° × 16 °	-
Working Temperature Range	-40 °C to +70 °C	-40 °C to +70 °C	-40 °C to +70 °C
Working Humidity Range	5 %RH - 95 %RH	5 %RH - 95 %RH	5%RH-95%RH
Measurement Accuracy	-4-0 km/h	-2-+2 km/h	-2-+2 km/h
Trigger Consistency	≤ ±1 m	≤ ±1 m	≤ ± 1 m
Velocity Range	10-250 km/h	10-320 km/h	10Km/h-300Km/h
Direction Information	Support	Support	Support
Double Trigger	Support vehicle front & rear triggering	Support vehicle front & rear triggering	Support vehicle front & rear triggering
Multiple Lanes	Support up to 1 lane	Support up to 3 lanes	Support up to 1-6 lanes
Wi-Fi Setting	Support	Support	Not Support
Capture Distance	Single lane 18-28 m	18-28 m	18 to 150 m (adjustable)
Communication Interface	RS485 (RS232 optional)	RS485, Wi-Fi	RS485, RJ45
Dimension	190 × 190 × 53 mm (7.48 × 7.48 × 2.09 inch)	166 × 139 × 40 mm (6.54 × 5.47 × 1.57 inch)	191 x 173 x 38.6mm

Supplement Light

Model	DS-TL2000AI-L1	DS-TL2000A-L1
Image		
Light Type	IR strobe supplement light	strobe supplement light
LED Lamp Beads	16	16
Color Temperature	-	5000 K - 7000 K
Angle of Light	10°	10°
Coverage	single lane	Single lane
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 110 VAC ±20%, 47 Hz-63 Hz
Consumption	Max.36 W (Determined by control model)	Max.36 W (Determined by control model)
Operating Temperature	-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	128 mm (W) × 216 mm (H) × 159 mm (D)	128 mm (W) × 216 mm (H) × 159 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	2.72 kg	2.72 kg

Model	DS-TL2002AI	DS-TL2002A
Image		
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-1211-1I
Image		
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 / 30 ms
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

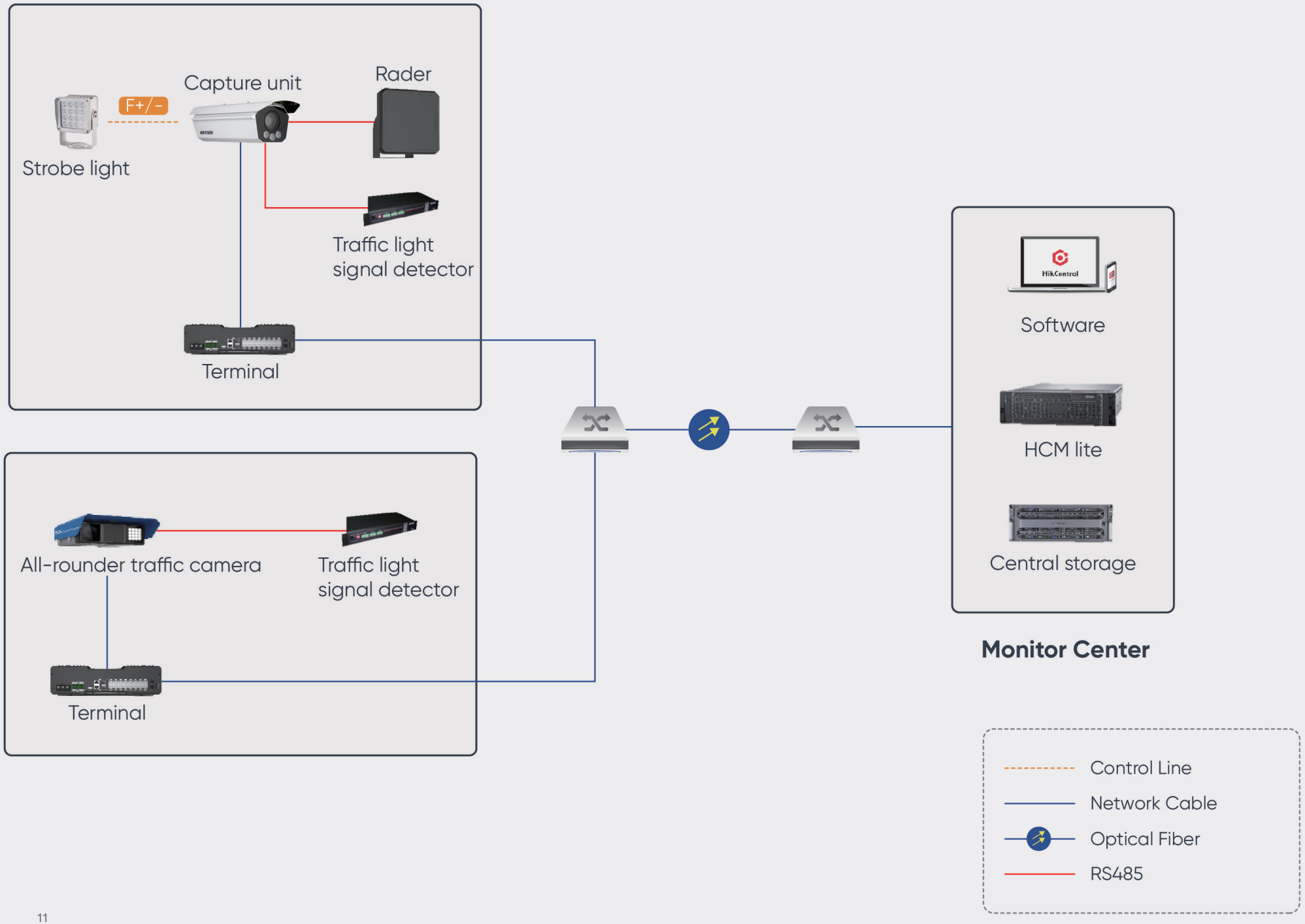
Intelligent Traffic System

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 all-in-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.


Capture unit
Rader
F+/-
Strobe light
Traffic light
signal detector
Terminal
All-rounder traffic camera
Traffic light
signal detector
Terminal
HikCentral
Software
HCM lite
Central storage
Monitor Center
Control Line
Network Cable
Optical Fiber
RS485

All-Rounder Traffic Camera

Model	iDS-TCE507-BR/1550	iDS-TCE907-BR/1140
Image	HOT  Deep Learning	HOT  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
Image	HOT  Deep Learning	HOT  Deep 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	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
Illegal Violation Detection	Running the red light, Wrong-way driving, Illegal lane change, Solid line driving, Driving in wrong lane at intersection, Illegal U-turn 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

Model	TLD-2016-6
Image	
Interface of AC Signal	16 ch
RS485 Output Interface	6
DC Output Interface	5 V dc ouput
Pin Switch	5 ch
Light of Status	16
Range of Detection Voltage	140 VAC-270 VAC, 50 Hz/60 Hz
Working Voltage	220 VAC @ 50 Hz/60 Hz, 100 VAC-240 VAC
Consumption	<5 W
Environment Temperature	-30 °C to +70 °C
Environment Humidity	5 % - 95 % @ 40 °C
Dimensions	440 × 44 × 213.5 mm (17.32 × 1.73 × 8.41 inch)

Traffic Server

Model	DS-TP50-16E	DS-TP50-08H
Image	HOT 	NEW 
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
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 %

Supplement Light

Model	DS-TL2000A-L1	DS-TL2002A
Image		
Light Type	Strobe supplement light	Strobe supplement light
LED Lamp Beads	16	28
Color Temperature	5000 K - 7000 K	5000 K - 7000 K
Angle of Light	10 °	10°
Coverage	Single lane	1.5 lane
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)	4V - 6V (High Level Trigger)
Trigger Frequency	15 Hz-250 Hz	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%, 47Hz-63Hz; 110 VAC ±20%, 47Hz-63Hz	220 VAC ±20%, 47 Hz-63 Hz
Consumption	Max.36W (Determined by control model)	Max.60W (Determined by control model)
Operating Temperature	-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	128 mm × 216 mm × 159 mm (5.04 × 8.5 × 6.26 inch)	322 mm (W) × 271 mm (H) × 118 mm (D)
Mounting Model	Support front-mounted installation (bracket rotation angle -90 ° to +90 °)	Support front-mounted installation (bracket rotation angle -90 ° to + 90 °)
Weight	2.72 kg	5.19 Kg

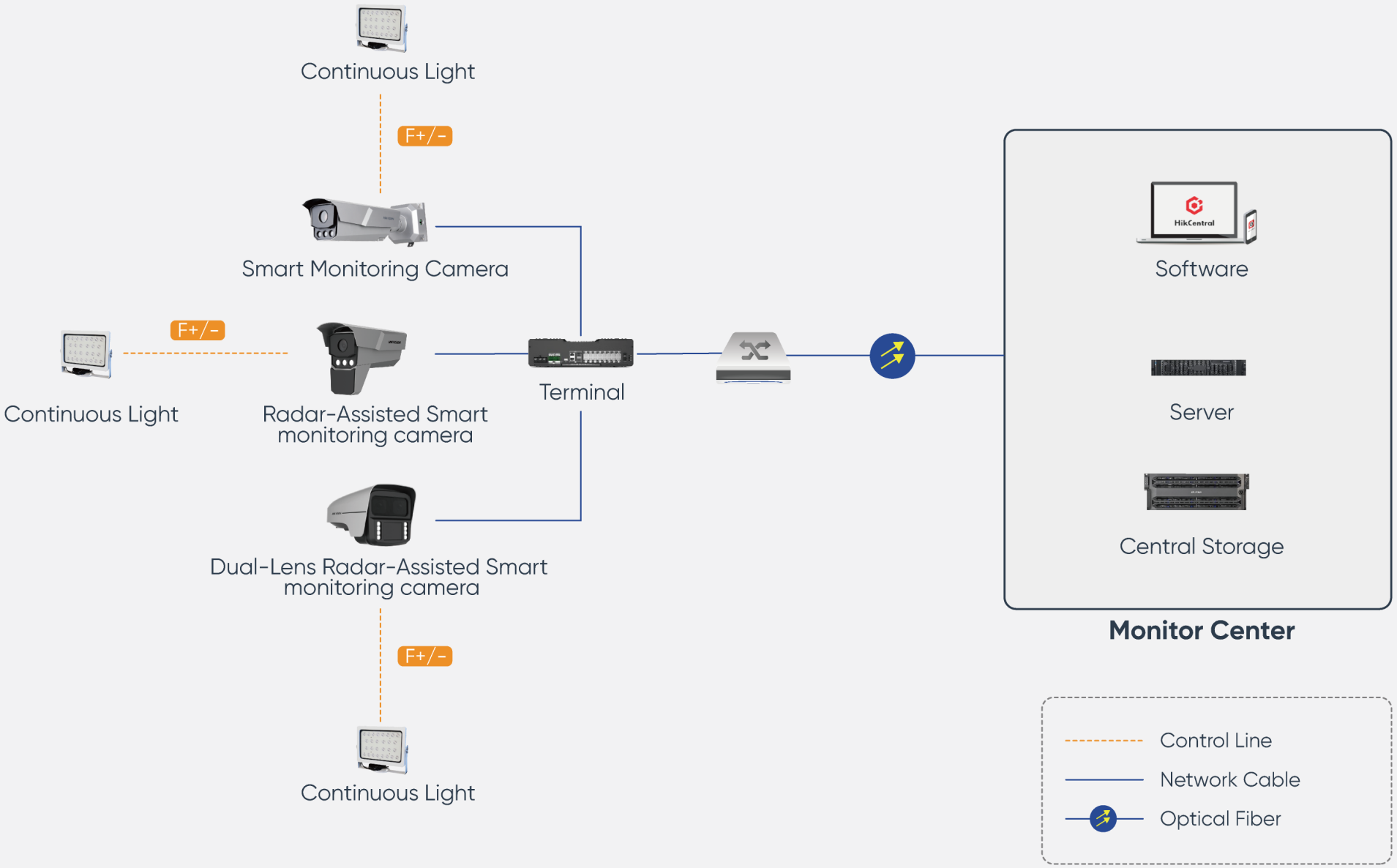
Intelligent Traffic System

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


Continuous Light
F+/-
Smart Monitoring Camera
F+/-
Continuous Light
Radar-Assisted Smart monitoring camera
Terminal
Dual-Lens Radar-Assisted Smart monitoring camera
F+/-
Continuous Light
HikCentral
Software
Server
Central Storage
Monitor Center
Control Line
Network Cable
Optical Fiber

Smart Monitoring Unit

Model	iDS-TCM403-B(G)	iDS-TCM403-BI(G)
Image	HOT  Deep Learning	HOT  Deep Learning
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
Coverage	1-3 lanes	1-3 lanes
Capture Speed Range	5 to 120 km/h	5 to 120 km/h
Capture Accuracy	99 %	99 %
LPR Accuracy	98 %	98 %
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
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
Video Compression	H.265/H.264/MJPEG	H.265/H.264/MJPEG
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
Communication Interface	1 RJ45 10M/100M/1000M Ethernet interface 1 RS-485 interface 1 Wiegand interface	1 RJ45 10M/100M/1000M Ethernet interface 1 RS-485 interface 1 Wiegand interface
ANPR Camera	4 MP (1/1.8" CMOS), max.2688 × 1520	4 MP (1/1.8" CMOS), max.2688 × 1520
Supplement Light	3 LED lights	3 LED IR lights
Protection Level	IP67, IK10	IP67, IK10
Storage	Built-in micro SD/TF card, up to 128 GB	Built-in micro SD/TF card, up to 128 GB
Operating & Storage Temperature	-30 °C to +70 °C (-22 °F to +158 °F)	-30 °C to +70 °C (-22 °F to +158 °F)
Operating & Storage Humidity	Humidity: 95% or less (non-condensing)	Humidity: 95% or less (non-condensing)
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)
Weight	3.12 ± 0.5 kg (6.88 ± 1.1 lb)	3.12 ± 0.5 kg (6.88 ± 1.1 lb)
Power Supply	12 VDC to 24 VDC ± 20%, PoE (802.3at, class 4)	12 VDC to 24 VDC ± 20%, PoE (802.3at, class 4)

Radar-Assisted Smart Monitoring Camera

Model	iDS-TCM403-EIR	iDS-TCM441-FR
Image	NEW  Deep Learning	NEW  Deep Learning
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°
Coverage	1-3 lanes	1-3 lanes
Radar Detection Distance	20 - 50 m (motor vehicles)	50m (pedestrian)
Radar & Capture Speed Range	10 to 100 km/h	5 to 120 km/h
Speed Measurement Accuracy	-2 to 2 km/h	-2 to 2 km/h
Capture Accuracy	99 %	99%
LPR Accuracy	98 %	98%
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
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
Video Compression	H.265/H.264/MJPEG	H.265/H.264/MJPEG
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
Communication Interface	1 RJ45 10 M/100 M/1000 M Ethernet interface 1 RS-485 interface,1 RS-232 interface	1 RJ45 10M/100M/1000M Ethernet interface 1 RS-485 interface 1 Wiegand interface
ANPR Camera	4 MP (1/1.8" CMOS), max.2688 × 1520	4 MP (1/1.8" CMOS), max.2688 × 1520
Supplement Light	3 LED lights	8 LED IR lights
Protection Level	IP67	IP67, IK10
Storage	Built-in micro SD/TF card, up to 128 GB	Built-in micro SD/TF card, up to 128 GB
Operating & Storage Temperature	-30 °C to +70 °C (-22 °F to +158 °F)	-30 °C to +70 °C(-22 °F to +158 °F)
Operating & Storage Humidity	Humidity: 95 % or less (non-condensing)	Humidity: 95% or less (non-condensing)
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)
Weight	2.5 ± 0.5 kg (5.5 ± 1.1 lb)	5 kg (11.02 lb)
Power Supply	12 VDC to 24 VDC ± 20%, Max. 12 W	36 VDC

Traffic Server

Model	DS-TP50-16E
Image	HOT 
Operating Interface	WEB
HDD Storage	4 x SATA (up to 6TB each HDD)
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
Video Input	16-ch
Reset Button	1
Indicator	4 x indicator (1 x Power Indicator, 1 x Alarm Indicator, 1 x HDD Indicator, 1 x Ready Indicator)
USB Port	1
RS232	2
RS485	2
Alarm Input	2
Alarm Output	2
Operating System	Embedded Linux operating system
Video	Stores videos. Storage duration depends on stream bitrate and HDD capacity.
Uploading	Automatic Network Replenishment (ANR) and manual uploading
Power Supply	12 VDC/12.5 A
Dimension (W × D × H)	370 × 273 × 102.5 mm (14.6 × 10.7 × 4.0 inch)
Working Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Working Humidity	10 % to 90 %

Model	DS-TP50-08H
Image	NEW 
Operating Interface	WEB
HDD Storage	1 SATA HDD (Up to 4TB)
External Storage	-
Network Interface	4 x 100 M self-adaptive Ethernet Interface 2 x 10/100/1000 M self-adaptive Ethernet interface
Video Input	4-ch & 4-ch via switches
Reset Button	-
Indicator	4 x indicator (1 x Power Indicator, 1 x Alarm Indicator, 1 x HDD Indicator, 1 x Ready Indicator)
USB Port	1
RS232	2
RS485	1
Alarm Input	1
Alarm Output	1
Operating System	Embedded Linux operating system
Video	Stores videos. Storage duration depends on stream bitrate and HDD capacity.
Uploading	Automatic Network Replenishment (ANR) and manual uploading
Power Supply	12 VDC
Dimension (W × D × H)	245 mm × 170 mm × 55 mm (9.6 × 6.7 × 2.1 inch)
Working Temperature	-30 °C to +70 °C (-220 °F to +158 °F)
Working Humidity	5 % to 95 %

Continuous Supplement Light

Model	DS-TL2002CI	DS-TL2002C	DS-TL2000CI
Image			
Light Type	IR continuous light	Continuous light	IR continuous light
LED Lamp Beads	28	28	16
Color Temperature	-	5000 K - 7000 K	-
Angle of Light	40°	40°	40°
Effective Distance	16-25 m	16-25 m	16-25 m
Response Time	≤ 20 us	≤ 20 us	≤ 20 us
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
Brightness Control	Two grades of brightness control	Two grades of brightness control	-
Remote Control	Adopt remote start-up the supplement light via a control line	Adopt remote start-up the supplement light via a control line	-
Supplement Light	The default output port outputs high voltage (typically 5V) (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 5V) (optional), when the light is turned on and the supplement light output current is too large or too small	-
Exception Detection	Supplement light output current is too large or too small	Supplement light output current is too large or too small	-
Service Life	≥ 50000 H	≥ 50000 H	≥ 50000 H
Housing Material	Die-cast aluminum	Die-cast aluminum	Die-cast aluminum
Power Supply	220 VAC ±20 %, 47 Hz ~ 63 Hz	220 VAC ±20 %, 47 Hz ~ 63 Hz	220 VAC ±20 %, 47 Hz ~ 63 Hz
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)
Operating Temperature	-40 °C to +70 °C	-40 °C to +70 °C	-40 °C to +70 °C
Operating Humidity	10 % ~ 90 %, no condensation	10 % ~ 90 %, no condensation	10% ~ 90 %, no condensation
Water Proof Rating	IP65	IP65	IP66
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)
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 °)
Weight	6.28 kg	6.28 kg	2.72 kg
Wave Length	≥ 850 nm (Infrared)	-	≥ 850 nm (Infrared)

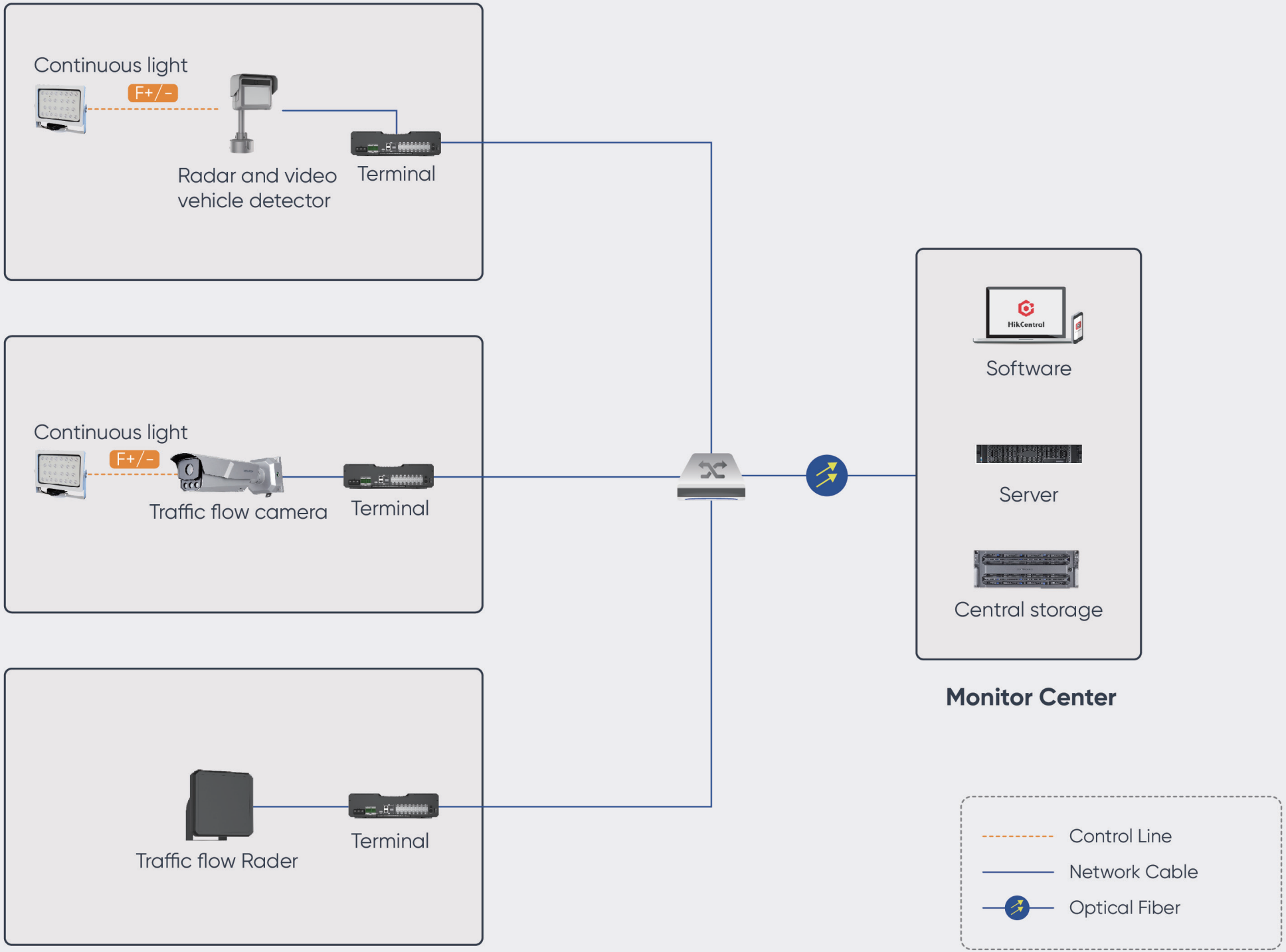
Intelligent Traffic System

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 all-weather 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


Continuous light
F+/-
Radar and video vehicle detector
Terminal
Continuous light
F+/-
Traffic flow camera
Terminal
Traffic flow Rader
Terminal
HikCentral
Software
Server
Central storage
Monitor Center
Control Line
Network Cable
Optical Fiber

Traffic Flow Detection Unit

Model	iDS-TCD403-BI(G)
Image	HOT  Deep Learning
Light Range	Up to 100 m
Coverage	Up to 6 lanes
Vehicle Counting Accuracy	>95 %
Traffic Data Collection	Traffic flow, speed, status, queue, time headway, space headway, number of parking vehicle in area, space occupancy, time occupancy, etc.
LED Supplement Lights	Built-in 3 IR supplement lights
Camera	4 MP (1/1.8" CMOS), max. 2688 × 1520
Frame Rate	50 Hz: 2688 × 1520 @ 25 fps 60 Hz: 2688 × 1520 @ 30 fps
Video Compression	H.265/H.264
Standard Protocols	TCP/IP, HTTP, HTTPS, FTP, DNS, RTP, RTSP, RTCP, NTP, IPv6, UDP
Communication Interface	1 RJ45 10M/100M/1000M Ethernet interface 1 RS-485 interfaces 1 Wiegand interface
Lens	8-32 mm @ F1.63-1.8 Horizontal FOV: 39.7° to 15.9°; Vertical FOV: 22.3° to 9.1°; Diagonal FOV: 45.8° to 18.1°
Protection Level	IP67, IK10
Storage	Built-in microSD/TF card, up to 128 GB
Operating & Storage Temperature	-30 °C to +70 °C(-22 °F to +158 °F)
Operating Humidity	95% or less (non-condensing)
Dimensions (W × H × D)	120 × 132.8 × 428.5 mm (4.72 × 5.23 × 16.87 inch)
Weight	3.12 ± 0.5 kg (6.88 ± 1.1 lb)
Power Supply	12 VDC to 24 VDC ± 20%, PoE (802.3at, class 4), Max. 12 W

Radar-Assisted Traffic Camera

Model	iDS-TCD402-CR/12
Image	HOT  Deep Learning
Frequency Band	77 GHz
Wave Length	4 mm
Speed Detection Range	1 to 200 km/h
Min. Illumination	Color: 0.01 Lux @ (F1.2, AGC ON) B/W: 0.001 Lux @ (F1.2, AGC ON)
Day/Night Switch	ICR
Focal Length	12 mm
Video Compression	H.265/H.264
Max. Resolution	2688 × 1520
Video Frame Rate	25 fps
Traffic Data Collection	Multiple traffic data output, including lane line, traffic flow, speed, status, queue, time headway, space headway, number of parking vehicle in area, average delay, space occupancy, time occupancy, etc. Supports real-time display of smart dynamic information.
Detection Range	200 m coverage in range of the scene
Multi-Target Detection	Able to track and detect max. 128 targets.
Virtual Coil	Two virtual coils for each lane. Signal output of vehicle entering and exiting virtual coils. Positions of virtual coils are adjustable.
Road Status	Smooth, slow, congested status detection
Network Interface	2, RJ45 100 M/1000 M self-adaptive Ethernet interface
Serial Port	1, RS-485 interface 1, RS-232 interface
Output Interface	1-ch level output
Protection Level	IP66
Operating &Storage Temperature	-30 °C to +70 °C (-22 °F to +158 °F)
Operating & Storage Humidity	<95 % (non-condensing)
Dimensions	226 × 206.4 × 375.3 mm (8.9 × 8.1 × 14.8 inch)
Power Supply	24 VAC ± 10 %
Power Consumption	< 15 W
Weight	3 kg (6.6 lb)

Traffic Flow Radar

Model	DS-TDSB00-EML
Image	NEW 
Working Frequency Range	60 to 61 GHz
Modulation Waveform	FMCW
Frescan Bandwidth	169 MHz@Narrow Beam
	500 MHz@Wide Beam
Distance Resolution	0.88 m@Narrow Beam
	0.3 m@Wide Beam
Distance Measurement Range	350 m@Narrow Beam
	100 m@Wide Beam
Horizontal Viewing Angle	-14.5° ~ +14.5° @Narrow Beam
	-60° ~ +60° @Wide Beam
Pitching Viewing Angle	-4.5° ~ 4.5° @Narrow Beam
	-12.6° ~ 12.6° @Wide Beam
Angle Resolution (0°)	1.86° @Narrow Beam
	6.23° @Wide Beam
Speed Measuring Range	-300 Km/h ~ 300 Km/h
Speed Measuring Error	-2 to 2 km/h
Trigger Mode	Approaching, leaving, bidirectional
Supported Number of Lane	1 to 8
Supported Number of target	1 to 256
Communication Interface	1 RJ45 10 M/100 M self-adaptive Ethernet interface 1 RS-485 interface
Working Voltage	12 to 24 VDC
Working Current	< 1500 mA
Consumption	< 18 W
Protection Level	IP67
Weight	1.75 kg
Working Temperature	-40 °C to +70 °C (-40 °F to +158 °F)

Traffic Server

Model	DS-TP50-16E	DS-TP50-08H
Image	HOT 	NEW 
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 100 M 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
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%

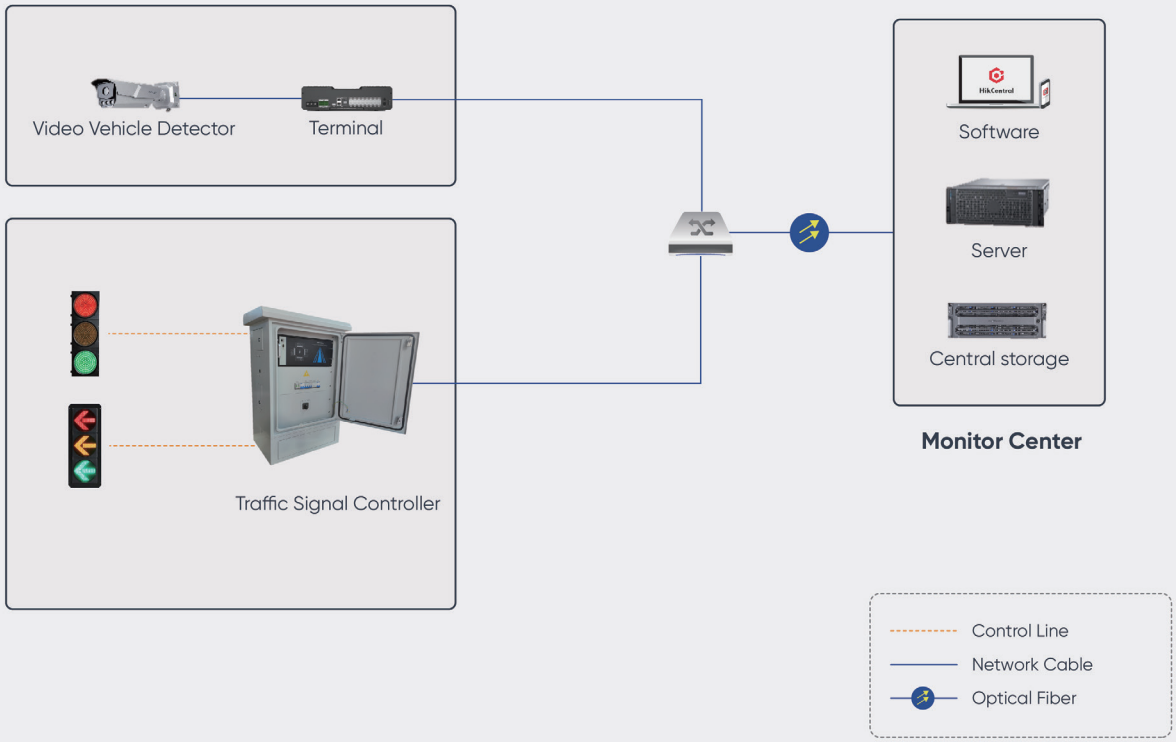
Intelligent Traffic System

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

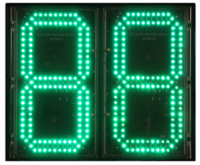


Traffic Signal Controller

Model	DS-TSC300-44H/HK3
Image	NEW 
Signal Light Output	44 × independent signal light output. Load capacity for one channel: 800 W
Signal Light Control Board	4
Equipment Cabinet	1
GPS Interface	1 GPS Satellite Signal Real-time Timing (Optional)
communication protocol	NTCIP
Network	1 × 100 M self-adaptive Ethernet interface
Other Interfaces	2 × RS-232, 2 × RS-4851 USB
External Input	8 × pedestrian button input
Working Voltage	220 ± 44 VAC/50 ± 2 Hz
Working Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Working Humidity	45 % to 95 % (no condensing)
Consumption	< 35 W
Insulation Resistance	> 100 MΩ
IP Code	IP54
Dimensions (W × H × L)	Control Cabinet: 482.5 × 221 × 290 mm (19.0 × 8.7 × 11.4 inch) Equipment Cabinet: 600 × 1084 × 450 mm (23.6 × 42.7 × 17.7 inch)

Signal Light

Model	RX300-3-2010SS-1	RX300-3-3910SS-1	FX300-3-3021SS-1	FX300-3-3022SS-1
Image	NEW 	NEW 	NEW 	NEW 
LED				
LED Diameter	Φ 5 mm (Φ 0.2")	Φ 5 mm (Φ 0.2")	Φ 5 mm (Φ 0.2")	Φ 5 mm (Φ 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
LED Wave Length	Red: 4500 mcd to 7200 mcd/625 ± 5 nm Green: 6000 mcd to 10800 mcd/506 ± 3 nm /	Red: 4500 mcd to 7200 mcd/625 ± 5 nm Green: 6000 mcd to 10800 mcd/506 ± 3 nm /	Red: 4500 mcd to 7200 mcd / 625±5 nm; Yellow: 4500 mcd to 7200 mcd / 592±3 nm; Green: 6000 mcd to 10800 mcd / 506±3 nm	Red: 4500 mcd to 7200 mcd/625 ± 5 nm Yellow: 4500 mcd to 7200 mcd/592 ± 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")	Φ 300 mm	Φ 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	/	/	/	/
Digit Distance	/	/	/	/
Digit Width	/	/	/	/

Model	FX300-3-3023SS-1	JD300-3-301SS-1	DX-3-T-1-80607S11-1
Image	NEW 	NEW 	NEW 
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
LED Wave Length	Red: 4500 mcd to 7200 mcd/625 ± 5 nm	Red: 4500 mcd to 7200 mcd/625 ± 5 nm	Red: 628 nm ± 1 nm
	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	Φ 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			
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 accident-prone 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
Image	NEW  Deep Learning	NEW  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

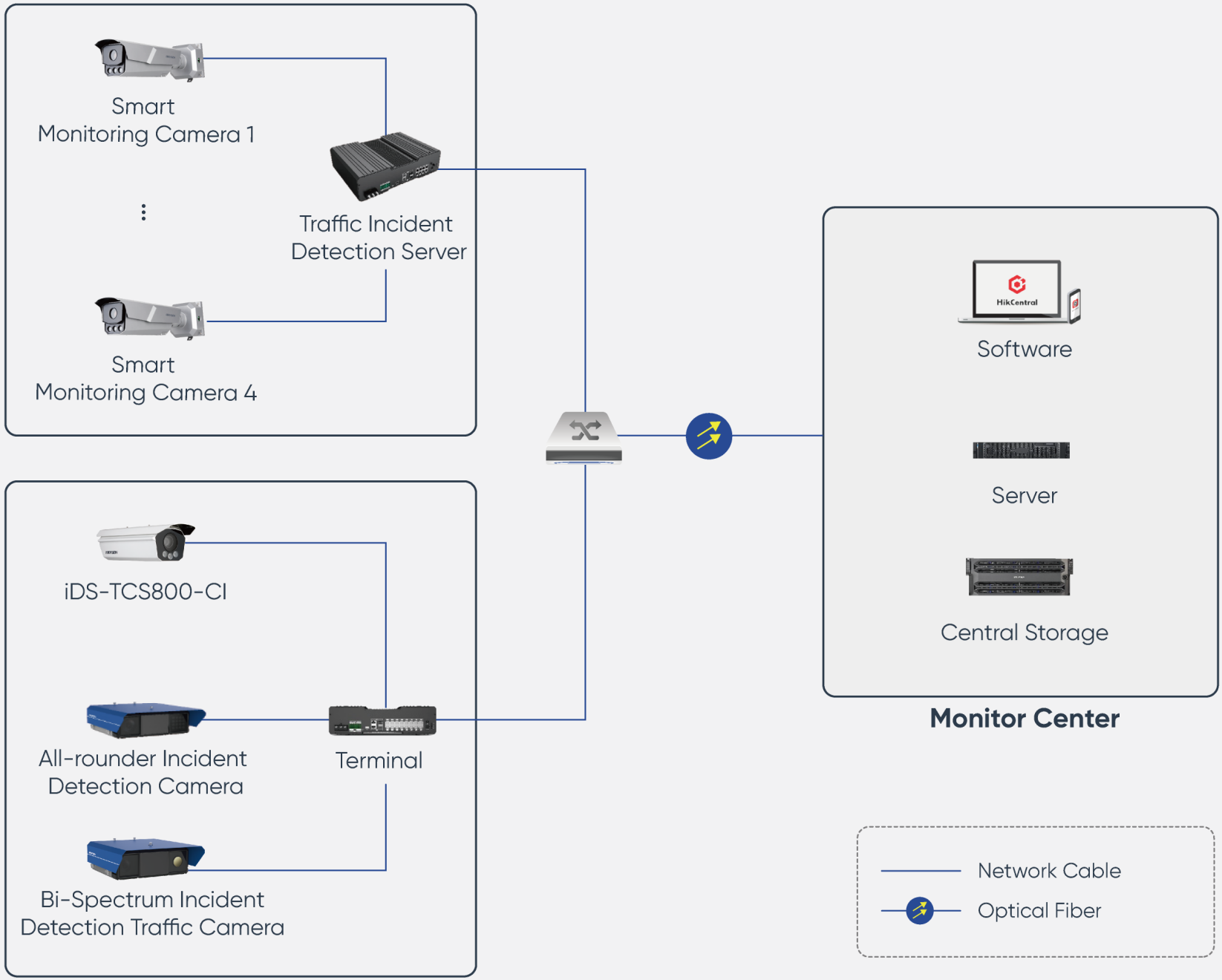
Model	iDS-TCS907-CER	iDS-TCS907-CIR
Image	HOT  Deep Learning	HOT  Deep Learning
Image Sensor	2/3" GMOS	2/3" GMOS
Resolution	4096 × 2160	4096 × 2160
Video Compression	H.265/H.264/MJPEG	H.265/H.264/MJPEG
Focal Length & FOV	11- 40 mm; Horizontal: 62° to 23.6°, vertical: 32.2° to 12.2°	11- 40 mm; Horizontal: 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

Model	iDS-TCS817-CR
Image	NEW  Deep Learning
Optical	
Image Sensor	8 MP (1/1.2" GMOS)
Min. Illumination	Color: 0.001 Lux@(F1.4, AGC ON) , 0.0005 Lux with IR
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°
Thermal	
Resolution	640 x 512
Focal Length	10 mm, 15 mm, 25 mm, 50 mm
Radar	
Frequency	77 Ghz
Measurment Range	2 to 200 km/h
Measurement Accuracy	±2 km/h
Coverage	Up to 3 lanes
General	
Video Compression	H.265/H.264/MJPEG
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, congestion, fire/smoke in tunnel detection, Speed drop, speeding, low-speed driving
Protocols	TCP/IP, HTTP, HTTPS, FTP, DNS, RTP, RTSP, RTCP, NTP, IPv6, UDP
Frame Rate	50 Hz: 25 fps 60 Hz: 30 fps
Protection Level	IP54
Interface	1 RJ45 10 M/100 M/1000 M self-adaptive Ethernet interface 1 RS-485 interface, 6 Alarm Output
Local Storage	Built-in micro SD/TF card, up to 128 GB
GPS	Optional
Temperature Sensor	Optiona;
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 (-22 °F to 158 °F)
Humidity	95 % or less, non-condensing
Power	100 to 240 VAC (with power adapter, by default) 36 VDC ± 20 % (without power adapter) 70 W MAX

AID Server

Model	iDS-TSS300-C/04	iDS-TSS500-C/16
Image	HOT  Deep Learning	HOT  Deep Learning
Operating Interface	WEB	VGA
HDD Storage	Up to 4 × 3.5-inch SATA HDD, 24 TB	-
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
Alarm Input	2	-
Alarm Output	2	-
Video Input	Up to 4-ch 4 MP IP cameras connection	Up to 16-ch 2 MP/3 MP IP cameras connection
USB Port	1 × USB 3.0	4 × USB 3.0, 2 × USB 2.0
RS232	2	-
RS485	2	-
HDMI/VGA Port	-	1 VGA
Memory	-	2 × 4 G Memory Bank
Display Lamp	Power Indicator, alarm status indicator,HDD indicator, running status indicator	UID Lamp, Alarm Lamp, Power Lamp, Ready Lamp
Key	Power on/off, Reset	Power on/off, Reset
Power	Max. 70 W	Hot Spare, Efficient, 1+1 Redundant, 800 W
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)
Operating Temperature	-30 °C to 70 °C (86 °F to 158 °F)	-40 °C to 70 °C (-40 °F to +158 °F)
Operating Humidity	10 % to 90 %	5 % to 95 %
Weight	-	16 kg (35.3 lb)


Smart
Monitoring Camera 1
Traffic Incident
Detection Server
Smart
Monitoring Camera 4
iDS-TCS800-CI
All-rounder Incident
Detection Camera
Terminal
Bi-Spectrum Incident
Detection Traffic Camera
HikCentral
Software
Server
Central Storage
Monitor Center
Network Cable
Optical Fiber

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
Image	NEW  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	Left& Right: 4 to 100 mm vari-focal Vertical FOV: 59.4 to 23.6 Diagonal 144.5 to 48.1 Middle: 3.2 mm fixed lens Horizontal FOV: 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
Image	NEW 
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
Image	NEW 
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

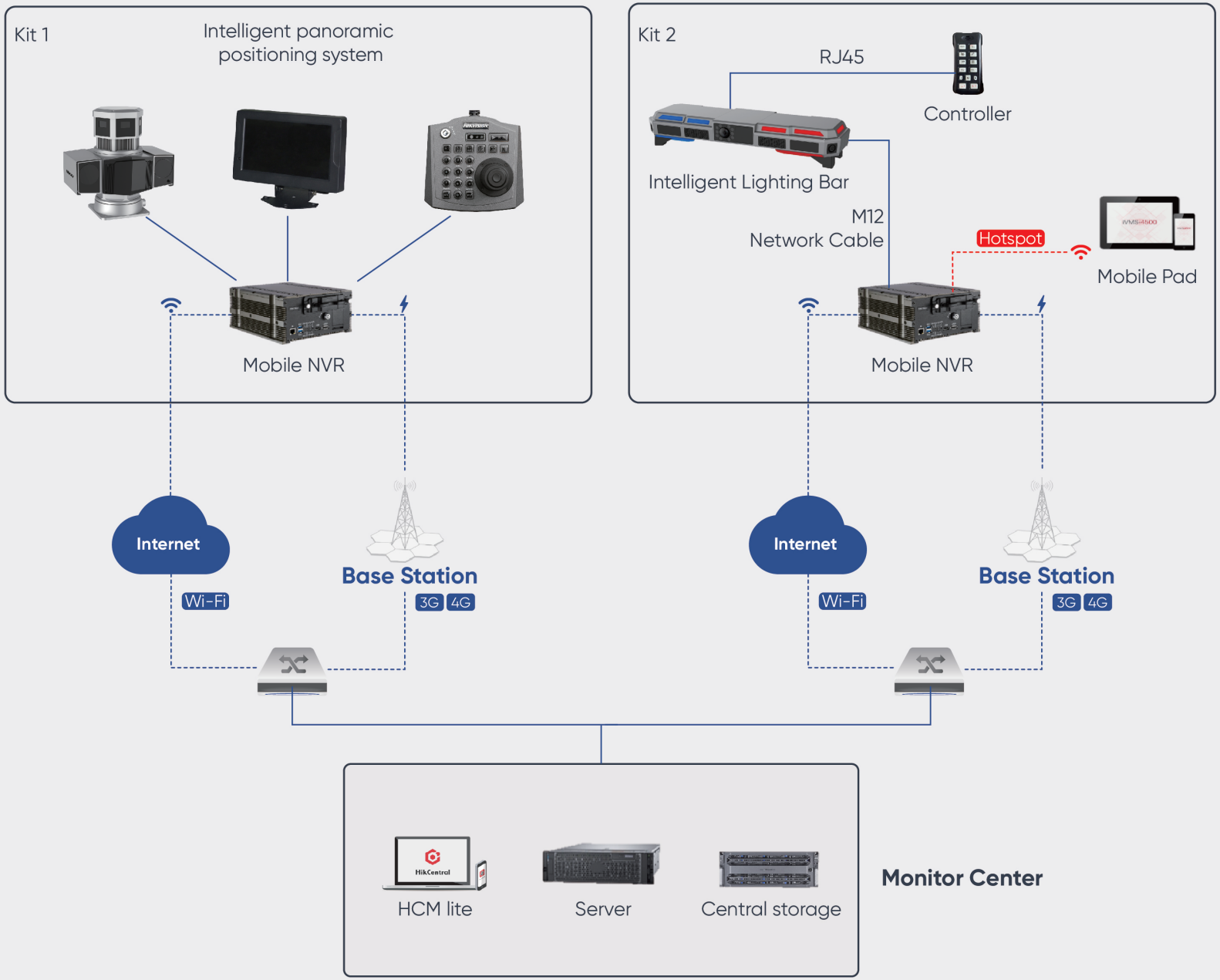
Intelligent Traffic System

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.


Kit 1
Intelligent panoramic positioning system
Mobile NVR
Kit 2
RJ45
Controller
Intelligent Lighting Bar
M12 Network Cable
Hotspot
Mobile Pad
Mobile NVR
Internet
Wi-Fi
Base Station
3G 4G
Internet
Wi-Fi
Base Station
3G 4G
HikCentral
HCM lite
Server
Central storage
Monitor Center

Mobile Enforcement System

Model	DS-MI9605-Q36
Image	
Video input	1-ch PTZ Camer (Aviation) 4-ch IP cameras (Aviation)
Two-way audio	1-ch, G.722
Video output	1-ch CVBS output 1-ch VGA output 1-ch HDMI output
Video compression	H.264, H.265
Max resolution	Main stream: 1080 P Sub-Stream: 4 CIF
Frame rate	PAL: 1 to 25 fps; NTSC: 1 to 30 fps
HDD/SSD	1 × 2.5 inch HDD/SSD. Up to 2 TB for each HDD/SSD 1 × SD card (stores data when HDDs/SSDs are damaged)
3G/4G dialing	3G/4G (optional)
Wi-Fi	2.4 GHz
GNSS (Global Navigation Satellite System)	GPS/GLONASS
Network interface	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)
Serial port	1 × RS-232
USB interface	Front panel: 2 × USB 3.0. Rear panel: 1 × USB 2.0 of 5-pin aviation plug
Alarm input	8 high/low level signal inputs
Power supply	9 to 32 VDC
Consumption	Standby: ≤ 0.5 W Full load: ≤ 99 W Note:Without peripheral and storage media ≤ 20 W
Working temperature	Device of which the dummy HDD with heating function: -30 °C to +60 °C (-22 °F to +140 °F) Other devices: -10 °C to +60 °C (14 °F to 140°F)
Working humidity	10 % to 90 %
Dimensions (W × D × H)	205 × 256 × 102.3 mm (8.1 × 10.1 × 4.0 inch)

Panoramic Positioning System

Road Maintenance Panoramic Positioning System

Model	iDS-TCC246-C-WGI/4M/5	iDS-TCC246-C-WGI/DLYH/4M/5
Image		
PTZ		
Imange Sensor	1/1.8" Progressive Scan CMOS	1/1.8" Progressive Scan CMOS
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)
Focal Length	5.9 to 135.7 mm, 23x optical zoom	5.9 to 135.7 mm, 23x optical zoom
Zoom Speed	4.8 s (optical, wide-tele)	4.8 s (optical, wide-tele)
Rotation Angle	Horizontal: 360° unlimited; Vertical: -90° to 90°	Horizontal: 360° unlimited; Vertical: -90° to 90°
Preset Speed	Horizontal: 100°/s; Vertical: 80°/s	Horizontal: 100°/s; Vertical: 80°/s
DNR	3D DNR	3D DNR
WDR	Supported	Supported
Picture Configuration	Brightness, contrast, sharpness, saturation	Brightness, contrast, sharpness, saturation
Digital Zoom	12	12
Manual Control of Speed	Horizontal: 0 to 60°/s; Vertical: 0 to 40°/s	Horizontal: 0 to 60°/s; Vertical: 0 to 40°/s
Number of Preset	256	256
Number of Patrol	8	8
Panoramic		
Image Sensor	6 x 1/1.8" Progressive Scan CMOS	6 x 1/1.8" Progressive Scan CMOS
Resolution	2688x1520 / 7256x1520 (Splicing)	2688x1520 / 7256x1520 (Splicing)
Focal Length	5 mm	5 mm
3D Positioning	Supports 3D positioning linkage in panoramic view	Supports 3D positioning linkage in panoramic view
General		
Bitrate	32 Kbps-12 Mbps	32 Kbps to 12 Mbps
Security Mechanism	Password protection, multi-user access control	Password protection, multi-user access control
Image Compression	H.264/H.265	H.264/H.265
Protocols	TCP/IP, HTTP, DHCP, DNS, DDNS, RTP, RTSP, SMTP, NTP, UPnP, SNMP, FTP, 802.1x, QoS, HTTPS	TCP/IP, HTTP, DHCP, DNS, DDNS, RTP, RTSP, SMTP, NTP, UPnP, SNMP, FTP, 802.1x, QoS, HTTPS
Network Interface	1 RJ45 10M/100M Ethernet interface, supporting remote upgrade	1 RJ45 10M/100M Ethernet interface, supporting remote upgrade
Power Supply	8 to 36 VDC	8 to 36 VDC
Protection Level	IP66	IP66
Working Temperature	-35 °C to +55 °C (-31 °F to +131 °F)	-35 °C to +55 °C (-31 °F to +131 °F)
Consumption	Max. < 85 W (Supplement light enabled)	Max. < 85 W (Supplement light enabled)
Working Humidity	< 90 %	< 90 %
Weight	12 kg (26.5 lb)	12 kg (26.5 lb)

Model	DS-MP1308
Image	
Screen	Multi-touch 7-inch
Screen Resolution	1280 × 800 RGB
Material	TFT
Backlight Mode	LED Backlight
Consumption	≤ 5 W
Working Voltage	12 V
Working Temperature	-20 °C to +60 °C (-4 °F to +140 °F)
Working Humidity	10 % to 95 %
Weight	0.6 kg (1.3 lb)
Dimension(W × D × H)	192.38 x 24.5 x 120.88 mm

Model	DS-MP1010K
Image	
Switch	1 metal power lock
Button	20 physical buttons with backlight
Interface	1 RS-485 interface
Vibration	Vibration damping design
Consumption	≤ 2 W
Weight	0.5 kg (1.1 lb)
Dimension(W × D × H)	143 × 135 × 40.4 mm (5.6 × 5.3 × 1.6 inch)

Model	DS-MDP002
Image	
Image Sensor	Front 8 megapixel camera, 13 megapixel rear camera
Screen Size	8 inch
Resolution	1920 × 1200
Wireless Network	4G: FDD -LTE B1, FDD -LTE B3, FDD -LTE B7, FDD -LTE B8, FDD -LTE B20 Wi-Fi 802.11b, 802.11g, 802.11n
Operating System	Android 9.0
Button	On/Off, volume +, volume -, Scan
Package Dimension	251 mm × 152mm × 15mm (9.9 × 6.0 × 0.6 inch)
Ingress Protection	IP65
Drop Protection Performance	Drop it twice for each side (6 sides in total) from the height of 1.2 m on the cement ground.
Power Supply Mode	Battery power supply
Working Temperature	-20 °C to 50 °C (-4 °F to 122 °F)
Working Humidity	≤ 90%
Wireless Network	Bluetooth, Wi-Fi Protocol, NFC
IR	Not supported
White Light	Supported
Storage	TF Card, Max. 256 GB
Peripheral Device Interface	Type-C,USB 2.0, Loudspeaker, MIC
Battery Capacity	8000 mAh
Product Weight	700 g (1.5 lb.)

Model	iDS-TVJ860-IR
Image	NEW 
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.
Resolution	Left Camera and Right Camera: 4 mm Front Camera and Rear Camera: 8 mm
Focal Length	Left Camera and Right Camera: 4 mm Front Camera and Rear Camera: 8 mm
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°
Aperture	Left Camera and Right Camera: F2.0 Front Camera and Rear Camera: F1.7
Built-in Supplement Light Type	IR light
Working Frequency	77 GHz
Speed Range	10 km/h to 300 km/h
Horizontal Detection Angle	± 60°
Distance Measurement Accuracy	± 150 m
Smart Function	License Plate Recognition, Radar Speed Detection, Facial Recognition
Protocols	TCP/IP, HTTP, ISUP, FTP, NTP, UDP
API	ISAPI, SDK, ISUP
Built-in LED	Supported
Network Interface	Switch: 1 gigabit Ethernet port
Protection Level	IP65
Dimension	1203.4 mm (W) × 232 mm (H) × 360 mm (D)
Power Supply	9 VDC to 15 VDC
Weight	Approx. 32.87 kg (72.5 lb.) (without package)
Power Consumption	180 W
Operating Condition	-30 °C to +70 °C (-22 °F to +158 °F). Humidity 95% or less (non-condensing

Remarks

Remarks

PRODUCT QUICK GUIDE

INTELLIGENT TRAFFIC SYSTEM

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