## **TSI5 | TSI98H-K980D**

## **Advanced 9MP AI-Enabled Camera**



## Features

- Advanced algorithm and processing features that allow to cover and capture 1-2 lanes.
- All-in-one design: including camera housing, optical processing mechanism, HD camera, integrated control module and other components, easy installation and commissioning, and reliable outdoor use.
- Shield fan-less cooling design: fully sealed internal working environment can avoid internal contamination caused by external dust intrusion.
- Advanced technologies enable consistent image quality for up to 18 months without requiring any maintenance.
- 9.0 Megapixel camera, 1-inch-high performance image sensor.
- Built-in front LED strobe light with a color temperature ≥5,000K, average power consumption ≤5W, lifespan >50,000 hours
- Efficient H.265 video compression algorithm with a frame rate up to 30 FPS and a bit rate of less than 16Mbps.
- Support camera temperature and humidity detection.
- Support internal pressure detection.
- IP68 protection.
- Built-in advanced TSI ANPR engine, equipped with deep learning algorithm.



## **Technical Specifications**

Model	TSI98H-K980D
Camera	
Image Sensor	9MP 1" GS CMOS High Performance Sensor
Image Resolution	4096*2176 (H x V)
Lens Mount	C mount
Lens	25mm; 35mm; 50mm (Optional)
Operation method	Electric Focus; Manual Aperture
Shutter Speed	Up to 1/62500s
Minimum Illumination	0.01 Lux @ F1.4 (color)
Backlight Compensation	Supported
Video Resolution	Main Stream: 4096*2176 Second Stream: 1080P
Video Frame	Up to 30 FPS (configurable)
Video Bit Rate	32 Kbps – 16 Mbps
Video Format	H.265 (Main Profile) / H.264 (Baseline Profile/Main Profile / High Profile)
Capture Format	JPEG compressed image
Capture Mode	Front / Rear
Intelligent recognition	Video detection, license plate recognition, vehicle model recognition, vehicle color recognition, vehicle logo recognition, etc.
Functionality	
Protocols	TCP/IP, HTTP, HTTPS, FTP, DNS, DDNS, RTP, RTSP, RTCP, NTP, UPnP, IPv6, UDP
API	GB28181, SDK, ONVIF, CGI
Storage	Support memory card storage
Trigger Mode	Loop Detector, Video, Radar
OSD Overlay	Time, address (position of channel), lane (number, direction), plate (number and color), vehicle (speed, color, logo, brand, type), non-motor vehicle feature
Time Synchronization	Supports NTP, ONVIF, SIP-1, SIP-2
Image Tampering Prevention	Supported



Intelligence	
License Plate Recognition	Supports recognizing GCC plates in the baseline version; for other countries/regions, customization is required
Detection Type	Supports recognizing large, medium, & small vehicles, & motorcycles in the baseline version as well as non-motor or pedestrian. For other vehicle types, customization is required.
Vehicle Color Recognition	Supports recognizing white, orange, pink, black, red, yellow, gray, blue, green, purple, brown, and silver gray.
Illegal Violation Detection	Supports no seat-belt, using mobile phone, driving in wrong direction, illegal lane change, solid line driving, illegal U-turn, driving in wrong lane at intersection.
Vehicle flow detection	Supports statistics (by lane and by time period) on vehicle flow, vehicle type, occupancy, average queue length, etc., and supports exporting reports.
Traffic Lane Detection	Supports the capture of up to 2 lanes.
Interface	
Network Interface	1 × RJ45, adaptive Ethernet interface
Control Interface	3 × RS485
Strobe Light Port	2 × strobe light control port
Storage Interface	1 × memory card slot (maximum support 256GB, standard 64GB) (embedded TF card)
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Storage Interface Power Supply Port	1 × memory card slot (maximum support 256GB, standard 64GB) (embedded TF card)
Storage Interface Power Supply Port General	1 × memory card slot (maximum support 256GB, standard 64GB) (embedded TF card) 1 × power supply port
Storage Interface Power Supply Port General Working temperature	1 × memory card slot (maximum support 256GB, standard 64GB) (embedded TF card) 1 × power supply port -40°C~+70°C
Storage Interface Power Supply Port General Working temperature Working environment humidity	1 × memory card slot (maximum support 256GB, standard 64GB) (embedded TF card) 1 × power supply port -40°C~+70°C 5%~95% @ 40°C (non-condensing)
Storage Interface Power Supply Port General Working temperature Working environment humidity Power consumption	1 × memory card slot (maximum support 256GB, standard 64GB) (embedded TF card) 1 × power supply port -40°C~+70°C 5%~95% @ 40°C (non-condensing) ≤ 39W
Storage Interface Power Supply Port General Working temperature Working environment humidity Power consumption Power Supply	1 × memory card slot (maximum support 256GB, standard 64GB) (embedded TF card) 1 × power supply port -40°C~+70°C 5%~95% @ 40°C (non-condensing) ≤ 39W 12V DC
Storage Interface Power Supply Port General Working temperature Working environment humidity Power consumption Power Supply Weight	1 × memory card slot (maximum support 256GB, standard 64GB) (embedded TF card) 1 × power supply port -40°C~+70°C 5%~95% @ 40°C (non-condensing) ≤ 39W 12V DC 8 Kg
Storage Interface Power Supply Port General Working temperature Working environment humidity Power consumption Power Supply Weight Physical size (L x W x H)	1 × memory card slot (maximum support 256GB, standard 64GB) (embedded TF card) 1 × power supply port -40°C~+70°C 5%~95% @ 40°C (non-condensing) ≤ 39W 12V DC 8 Kg 510mm × 185mm × 185mm

