DS-TSC300-44H/HK3
Intelligent Networking Traffic Signal Controller

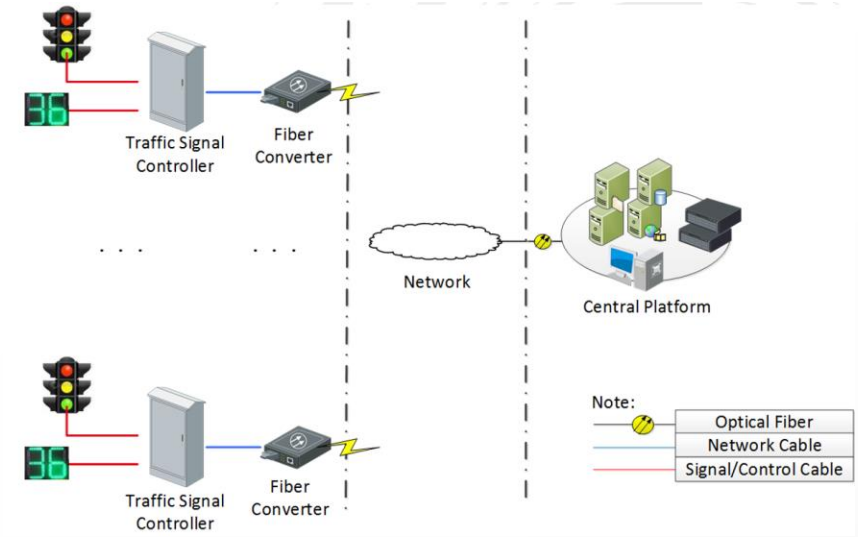
- Modular design method，easy to install and maintain
- Using controllable silicon to control the signal light，keeping the device stable
- Using open, standard communication protocol, easy to extend
- Equipped with display and control panel, which can real-time monitor and manually adjust the signal status
- Auto-monitoring system for the communication modules and lights. It will automatically alert and react to any problems that arise
- Equipped with independent yellow flash controller，enhancing the security；
- Manually control the on and off of a channel/a light separately, which is convenient for wiring inspection during debugging and lamp status inspection during maintenance
- Support online upgrades without interrupting the running of the scheme
- Log level: debug, info, warning, error, fault

▪ Specification

Function	
Timing Strategy	Supporting 64 phases, 255 patterns, 64 plans, 255 Schemes(Adjustable on demand)
Signal Control Board and Channel	4 output board(s), supporting 44 channel(s) and 16 group(s) signal lights (12 groups for vehicle + 4 groups for pedestrian)
Signal Control Mode	•Fixed Cycle: A preset time is given to each movement every cycle, Multiple phase/cycle parameters can be set in different time periods. •Full-Actuated: Real-time optimization of green light timing based on traffic data, such as lane flow, in all lanes at the intersection. •Semi-Actuated: Based on traffic data in certain lanes, such as flow, it provides real-time optimization of the green light duration for the main lanes and reduces the unnecessary green light duration for the secondary lanes. •Self-Adaptive: For congested intersection scenarios, calculate and optimize the cycle and phase durations based on historical traffic data of the all lanes to Improve the traffic efficiency. •Single-Point Optimization: According to historical and real-time traffic data, timing parameters are calculated in advance and adjusted in real time during running. •Coordinates Green wave: Consider the linkage of multiple intersections, set parameters such as phase difference, and ensure that vehicles in the main direction encounter green lights all the way. •Pedestrian Crossing: Adjust signal timing based on pedestrian in demand. •Special control: Light Disable, Yellow Flash and All red.
Control Type	Local mode,web control,HCM control,manual key control,third-party platform control
Manual Control	Auto, Manual, Step-to-Step, Yellow Flash, All Red and Special Directional control
Web Configuration	Supports web browser configuration, 3D interface display of the real-time status of the intersection
Time Synchronization	Supports NTP time synchronization, satellite time synchronization (GPS antenna installation required), manual time configuration, and third-party platform time synchronization
Countdown Timer Access	Self-learning mode,Pulse countdown,Chinese standard 2014/2004
Upgrade	Supports silent and restart upgrades
Network	
Network Protocol	TCP/IP,HTTP,NTP, IPv4,802.1X,UDP
Client	HikCentral Master Lite,Hik-Central Master
Web Browser	chrome 100+
API	connect to the HCM through the OpenAPI , or connect the device throught NTCIP
Security	Password protection,Complicated password,802.1X authentication (EAP-PEAP, EAP-LEAP, EAP-MD5),IP address filter,Host authentication (MAC address),Security audit log,Basic and digest authentication for HTTP/HTTPS
Interface	
Ethernet Interface	1 RJ45 10M/100M self-adaptive Ethernet interface
RS-485	2 × RS-485 interface(s)
RS-232	1 × RS-232 interface(s)
USB	1 × USB 2.0
Alarm	Supports 8-ch pedestrian button input(s)

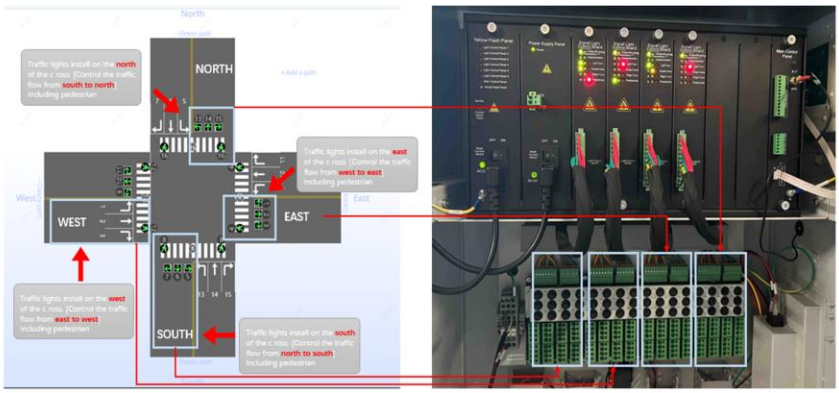
Control Panel	13 buttons: auto, manual, step-to-step, yellow flash, all red and special directional control buttons
Wireless Controller (Optional)	5 buttons: Auto, manual, all red, yellow flash, and step-by-step control, or button customization
GPS (Optional)	(Optional) Support GPS Satellite Signal Real-time Timing
General	
Power Output	AC 100 V to 240 V,50/60 Hz
Power Input	AC 100 V to 240 V,50/60 Hz
Overall Power Consumption	≤ 35 W (no load)
Signal Channel Consumption	≤400W@AC220V;≤200W@AC110V
Insulation Resistance	≥ 100 MΩ
Backup Power Supply	Supports manual switching of main and backup power supply
Operating Condition	-40 °C to 70 °C (-40 °F to 158 °F). Humidity: 95% or less (non-condensing)
Storage Condition	-40 °C to 70 °C (-40 °F to 158 °F). Humidity: 95% or less (non-condensing)
Installation Mode	Floor-standing
Net Weight	Approx. 86.1 kg (189.82 lb.)
Gross Weight	Approx. 93 kg (205.03 lb.)
Dimensions (Without Package)	680 mm × 500 mm × 1081.8 mm (26.77" × 19.69" × 42.59") (L × W × H)
Dimensions (with Package)	870 mm × 670 mm × 1270 mm (34.25" × 26.38" × 50.00") (L × W × H)
Cabinet Material	SECC
Approval	
EMC	EN 50293:2012
Safety	EN IEC:62311-1:2021,EN IEC:62311-2:2021
Environment	CE-RoHS: 2011/65/EU
Protection	IK10:IEC 62262:2002,IP54:IEC 60529-2013

▪ Typical Application



▪ Wiring

Traffic lights and TSC300 wiring Instruction



Wiring ports Instruction

▪ Available Model

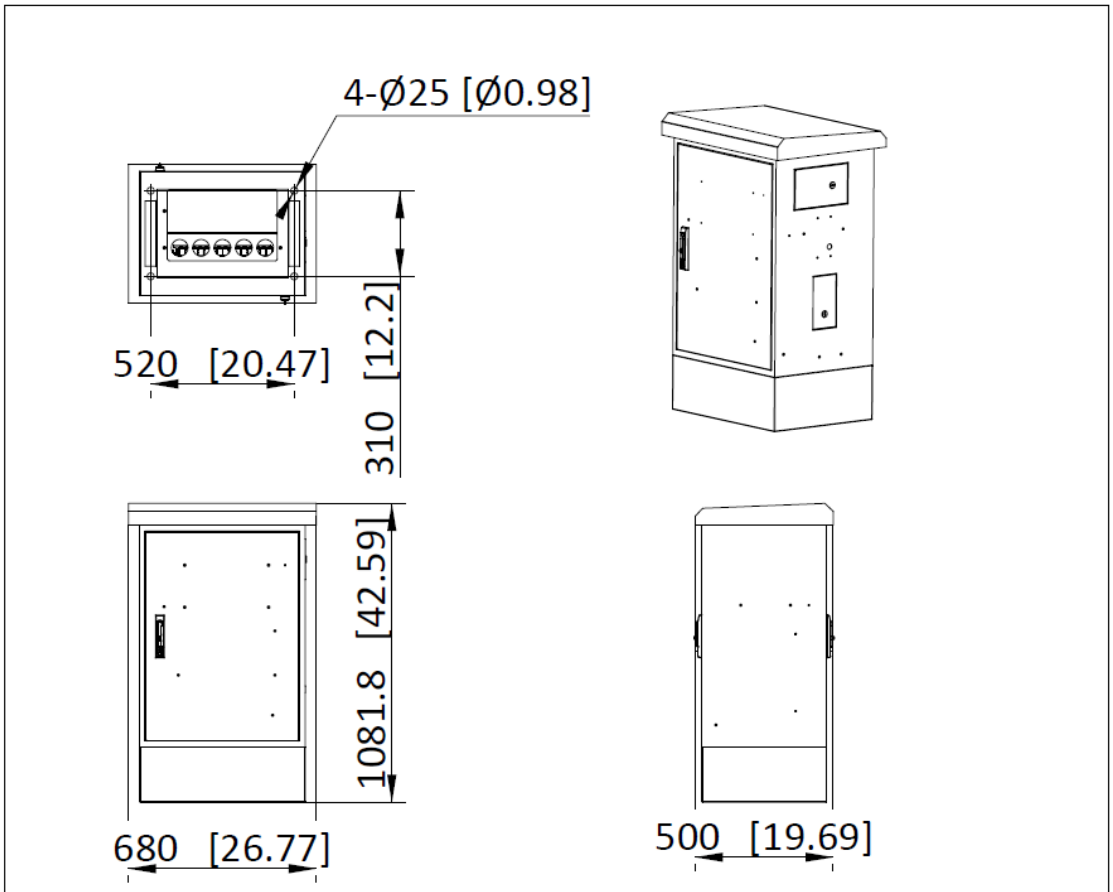
DS-TSC300-44H/HK3

DS-TSC300-44H/HK3 main engine

DS-TSC300-MEX(campeche)

DS-TSC300-44H/HK3/304(campeche)

▪ Dimension



L× W× H:680mm× 500mm× 1081.8mm(26.77× 19.69× 42.59

Camera Mounting Hole[mm]	Camera Mounting Hole[inch]
4-Ø25	4-Ø0.98

Unit: mm [inch]

SCALE	1:2.5

▪ Accessory

▪ Optional

JD300-3-301SS-1	FX300-3-3021SS-1	FX300-3-3022SS-1	FX300-3-3023SS-1	RX300-3-2010SS-1
				

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