

DHI-ITASD-020RA

Red Light Signal Detector



The red light signal detector is an integrated and intelligent device that collects evidence with greatly improved accuracy and reliability for running red lights. Compared to RS-485 mode, this device can transmit traffic light status over the network, not only capturing various kinds of running red lights and providing more accurate as well as reliable evidence, but also enabling lower deployment cost and efficient construction.

Functions

Signal Detection

Supports connecting up to 20 traffic lights and detecting their on/off status. The signal status can be transmitted to the network camera in real time through 100Mbps network port.

Parameter Configuration

Supports configuring 20 channels of camera parameters and channel parameters through the configuration tool. Up to 5 camera IPs can be bound to 1 channel.

Status Viewing

Supports viewing the online status of cameras and the red/green status of their bound channels through the configuration tool.

Mode Switch

Supports setting red light detection mode or green light detection mode through the configuration tool.

Anomaly Detection

Detects anomaly of 20 channels of red/green input signal and anomaly recovery, and records logs. Signal input duration limit can be adjusted between 1–300 seconds.

Time Synchronization

NTP time sync or sync time with PC through configuration tool.

Network Status Monitoring

Supports setting up switch gateway through the configuration tool, and enabling ping to check network status. Log will be generated for first successful or failed ping operation.

Logging

Records up to 1700 logs, and through the configuration tool, you can search for logs relating to the device, time sync, ping success or failure, red/green light signal input anomaly and anomaly recovery.

Hardware Reset

Press and hold the RESET button to reset all configurations of the device, except device ID, Board SN and MAC address.

Scene

Applicable to the detection system for pedestrians/vehicles running red lights at intersections.

Technical Specification

Basic

Status Indicator	1 RUN indicator, 1 LAN indicator, 20 input status indicators
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Function

Parameter Configuration	Supports 20 channels of camera parameters and channel parameters configuration
Status Detection	Camera online/offline status and traffic light red/green status
Mode Switch	Supports red/green light detection modes
Signal Input Anomaly Detection	Supports red/green signal anomaly detection; Signal input duration limit can be adjusted between 1–300 seconds
Time Synchronization	Supports NTP/PC time sync
Network Status Monitoring	Yes
Logging	Records up to 1700 logs

Port

Signal Input	20 channels, 220V AC red/green light signal
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RS-485	1 port for debugging
Network	1 RJ45 100Mbps Ethernet port for data transmission

General

Hardware Reset	Yes
Power Supply	12V DC (provided)
Power Consumption	<3W
Operating Temperature	-40°C to +65°C (-40°F to +149°F)
Operating Humidity	10%RH-95%RH (non-condensing)
Dimensions	190.0 mm × 150.0 mm × 42.0 mm (7.48" × 5.91" × 1.65")
Net Weight	1 kg (2.20 lb)
Gross Weight	1.2 kg (2.65 lb)
Installation	Rack-mounted/Desktop-mounted

Ordering Information

Type	Model	Description
Detector	DHI-ITASD-020RA	Red Light Signal Detector

Dimensions (mm[inch])

