ClairEYE VSeries

Traffic Video Detector

DYMEC AMERICAN INDUSTRIAL



The ClairEye VSeries Video Traffic Flow Detector is the latest generation of video detection products, utilizing the industry's most advanced SOC+GPU hardware architecture and cutting-edge traffic detection algorithms. While maintaining the proven performance and reliability of video detection, it enables easy implementation of future functionality. The ClairEye VSeries supports a wide range of real-time and statistical data, including accurate vehicle speed, facilitating vehicle type detection, as well as travel time analysis. It can also provide precise analysis and alerts for traffic flow status.

This series of products is applied to urban roads to provide real-time traffic data for signal control systems, guidance, and conflict warning systems. Additionally, it offers real-time or historical statistical data through the network for traffic engineers and road planners.

Outstanding Performance

- Real-time Data: Includes traffic flow, real-time speed, vehicle type, queue length, etc.
- Statistical Data: Encompasses traffic flow, average speed, headway time, gap distance, time occupancy rate, space occupancy rate, etc.
- Enhanced Features: Enables vehicle type detection and recognition, achieving accurate travel time analysis between multiple devices.
- Traffic Status: Analyzes traffic conditions such as slow-moving, congestion, and queued traffic.

Easy Installation and Commissioning

- This series of products supports forward, backward, and side detection, allowing for either forward or backward installation on crossbars and support for roadside pole installation.
- Installation can be completed with the included hex wrench; initialization and normal operation can be achieved within five minutes.



Key Features

- Starlight-grade image sensor for excellent nighttime performance.
- Independent GPU chip for running more advanced algorithms.
- Capable of traffic, event, and travel time calculation and analysis.
- Supports hardware and software function expansion based on on-site requirements.
- Compatible with both horizontal and vertical pole installations, expanding application scenarios.
- Product installation and debugging can be completed with a single wrench.
- Patented integrated design ensures high reliability in product operation.

Specification

Catagory		Features
Video	Video resolution (main stream)	5M (2560*1920)
	Encoding format	H.264, H.265
	Frame rate	25 frames (adjustable)
	Minimum illumination	Color 0.02Lux@F1.2 Black & White 0.01Lux@F1.2
	Dual stream	Supports main and sub streams
	LENS	3.6-12mm (fixed lens, 12mm as default)
	Video Recording	Support OVNIF protocol for NVR recording
Processor	SOC processor	A7@600MHz
	GPU processor	1T computing power
Detection	Lanes	1-8 lanes
	Flash memory	128M (expandable)
	Real-time data	Speed, traffic flow, vehicle type etc.
	Statistics data	Speed, traffic flow, occupancy rate, headway, queue length
	Traffic status	Slow-moving, congested, queued
	Traffic flow detection accuracy	≥95%
	Vehicle type accuracy	≥95%
	Occupancy detection accuracy	≥95%
	Speed detection accuracy	≥92%
	Queue length accuracy	≥92%
	Non-motorized vehicle filtering rate	≥97%
Communication	Sampling period	30-300s, continuously adjustable
	Communication port	1*LAN
Installation	Dimension	D*W*H: 330*147*229mm (12.99*5.79*9.02inch)
	Weight	2.2KG (4.85 pound)
	Installation height	5m-8m (16.40-26.25 ft)
	Mounting bracket	Universal fixed bracket, adjustable in two axes, supports both horizontal and vertical pole installation
Environment and Reliability	All-weather operation	Unaffected by day and night, weather, and adverse conditions
	Operating temperature	-40 to 75°C (-40 to 167°F)
	Humidity	0-95%RH
	IP class	IP66
	MTBF	>50000 hours
Power	Power supply	AC100-240V, 50-60Hz
	Power consumption	8W

Ordering Information

ClairEye-V: VSeries traffic video detector with 12mm focus length as default which fits 20m detection distance. **ClairEye-V-EXT:** Converter terminal from Ethernet to IO output.

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