

AI Stereo Vision People Counter VS125-LW

Milesight



VS125-LW is a professional people counting sensor based on deep learning AI and Binocular Stereo Vision technology. This sensor possesses an impressive accuracy of up to 99.8% in people counting, and it delivers exceptional performance even in low light environment and total darkness. In addition, it can perform rich attribute recognition, including gender, children, and staff. It is designed with privacy protections that comply with GDPR.

VS125-LW offer various connectivity options (Cellular and PoE) for seamless connectivity and efficient space management across applications. Additionally, it provides rich interfaces for versatile connection options (RS485/DO/DI), expanding the possibilities for integration and customization.

The device can be easily installed, making it ideal in retail stores, malls, offices, subways, and other locations.

◆ Features

Highly-efficient Sensing Ability

- Up to 99.8% people counting accuracy with AI and stereo vision technology
- Great lighting adaptability that allows it to work well in low light environments and complete darkness
- Supports a minimum installation height of 1.9 meters and provides a detection range of up to 40 square meters at an installation height of 3.5 meters
- Customer-defined preview privacy settings, no data with personal information is transmitted, complies with GDPR
- Supports line crossing people counting, regional people counting and dwell time detection
- Rich attribute recognition capabilities, including gender, group counting, children and staff identification etc, provide deeper insights
- Supports heat map functionality for analyzing foot traffic intensity and distribution
- Supports view direction detection for retail layout and advertising optimization
- Supports Multi-Device Stitching which enables the linking of multiple devices, allowing for up to 16-device stitching to expand coverage
- Supports local data storage and data retransmission to ensure secure data collection

Rich Connectivity Options

- Provide multiple connectivity options (PoE, Cellular)
- Supports RS485/DI/DO multiple interfaces and has strong scalability
- Allows quick and easy management via Milesight DeviceHub and the Milesight Development Platform
- High compatibility of data transmission with HTTP(s)/MQTT(s) protocol and API, supports customized push content methods

◆ Specifications

Version	PoE Version	Cellular Version
Model Name	VS125-LW-P	VS125-LW-L0EGL
Sensor		
Sensor	2 × 5MP Sensor (2592 × 1744)	
Installation Height	1.9 ~ 3.5m	
FoV	130° Horizontal, 117° Vertical	
Required Illumination	0 lux with iR illuminators On	
General Description		
Data Retransmission	Support 8 × 50000 data retransmission packets	
Local Storage	Stores up to one million data records and supports exporting CSV files	
Multi-Device Stitching	Support up to 16 devices stitching to expand coverage	
Features		
Basic Features		
Bi-Directional People Counting	Up to 4 detection lines for bi-directional people counting	
Regional People Counting & Dwell Time Detection	Up to 4 detection areas (up to 10 decagon for each area) for regional people counting and dwell time detection	
Advanced Features		
Children/Adult Differentiation	Support (Installation Height: 1.9 ~ 3.3m)Filter redundant counting of people wandering in the bi-directional people counting areas Staff detection: support staff lanyard, staff badge, staff epaulet, and UWB kit VA05	
Staff Detection		
U-turn Filtering		
Gender Recognition		
Group Counting	Support	
Heat Map	Support	
View Direction Detection	Support	
Validation	8GB	
Data Transmission		
Ethernet		
Ethernet Port	1 × RJ45 10/100 Mbps (PoE PD)	1 × RJ45 10/100 Mbps
Network Protocol	MQTT(s), HTTP(s), 802.1x, SSH, NTP, OpenVPN, BACnet/IP, etc.	MQTT(s), HTTP(s), SSH, NTP, OpenVPN, etc.
Ethernet Isolation	1.5 kV RMS	-
Cellular		
Antenna	-	Internal Antenna
Network	-	4G LTE (CAT1)

Frequency Band	-	LTE-FDD: B1/2/3/4/5/7/8/12/13/18/19/20/25/26/ 28/66 LTE-TDD: B34/38/39/40/41
SIM Slot	-	1 x Nano SIM (4FF) Slot, 1.8V/3V
Other Interfaces		
Power Connector	1 × DC Jack Connector	
DI/DO	1 × DI, 2 × DO	
Serial Interface	1 × RS485 (Under Development) 1 × UART(Used to connect VA05 UWB Staff Detection Anchor)	
Wi-Fi	IEEE 802.11 b/g/n, 2.4GHz (AP Mode for configuration)	
Button	1 × Reset/Wi-Fi Button	
LED Indicators	1 × RGB LED indicator	
Physical Characteristics		
Power Supply	802.3af PoE or DC 12V/1A	DC 12V/1A
Power Consumption	Avg. 6.9W Max. 12W	Avg. 6.5W Max. 12W
Ingress Protection	IP40	
Dimension	185 × 85 × 34 mm (7.26 × 3.35 × 1.34 in)	
Weight	284.4g	280.9g
Color	White or Black (Optional)	
Installation	Ceiling Mounting, Extended Ceiling Mounting & Lintel Mounting (with Optional Multifunctional Bracket)	
Environment&Reliability		
Regulatory	CE, FCC	
Environment	RoHS	
Operating Temperature	-20℃ ~ 60℃	
Relative Humidity	0 ~ 95% (Non-condensing)	
MTBF	1,510,826 hours	

◆ Detection Area

Installation Height (m)	Detection Area(m)
1.9	0.86 × 0.65
2.0	1.28 × 0.98
2.2	2.14 × 1.63
2.5	3.43 × 2.61
3.0	5.57 × 4.24
3.5	7.71 × 5.87

◆ Dimensions (mm)

