AI Stereo Vision People Counter

VS125



VS125 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 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
- With high ceiling mounting of up to 6m, support automatic tilt correction and automatic infrared light adjustment

- 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
- BACnet/IP native integration for building management systems

◆ Specifications

Version	**PoE Version**	**Cellular Version**
Model Name	**VS125-P**	**VS125-L0BEU**
Sensor		
Sensor	2 × 4MP Sensor (2688 × 1520)	
Installation Height	2.2 ~ 6m	
FoV	101° Horizontal, 70° Vertical	
Required Illumination	0 lux with iR illuminators On	
Advanced Function		
Bi-Directional People Counting	Up to 4 detection lines for bi-directional people counting	
U-turn Filtering	Filter redundant counting of people wandering in the bi-directional people counting areas	
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	
Children/Adult Differentiation	Support (Installation Height: 2.2 ~ 4m)	
Staff Detection		
Gender Recognition		
Group Counting	Support	

Heat Map	Support	
View Direction Detection	Support	
Multi-Device Stitching	Support up to 16 devices stitching to expand coverage	
Validation	8GB	
Data Retransmission	Support 8 × 50000 data retransmission packets	
Local Storage	Stores up to one million data records and supports exporting CSV files	
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/B3/B5/B7/B8/B20/B28 for EMEA+Australia/New Zealand
SIM Slot	-	1 x Nano SIM (4FF) Slot, 1.8V/3V
Other Interfaces		
Power Connector	1 × DC Jack Connector	
DI/DO	1/2	
Serial Interface	1 × RS485 (Under Development)	
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. 5.9W Max. 11.1W	Avg. 5.1W Max. 10W
Operating Temperature	-20°C ~ 50°C	
Relative Humidity	0 ~ 95% (Non-condensing)	
Ingress Protection	IP40	
Dimension	185 × 85 × 34 mm (7.26 × 3.35 × 1.34 in)	
Weight	275g	272g
Color	White or Black (Optional)	
Installation	Ceiling Mounting, Extended Ceiling Mounting & Lintel Mounting (with Optional Multifunctional Bracket)	

Approvals		
Regulatory	CE, FCC	CE
Environment	RoHS	

◆ Detection Area

Installation Height (m)	Detection Area(m)
2.2	1.21 × 0.7
2.5	1.94 × 1.12
3.0	3.16 × 1.82
3.5	4.37 × 2.52
4.0	5.58 × 3.22
4.5	6.80 × 3.92
5.0	8.01 × 4.62
5.5	9.23 × 5.32
6.0	10.44 × 6.02

◆ Dimensions (mm)

