

AI Stereo Vision People Counter IPCS-SVx/IPCS-SV-LWx Indoor Series



Deep-learning AI with binocular stereo-vision technology

Vicinia IPCS-SVx and IPCS-SV-LWx indoor series are professional people counting sensor based on deep learning AI and Binocular Stereo Vision technology. The four members of this family provide standard and low and wide versions for different installation heights and cellular and PoE connectivity options.

This sensor family 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. Vicinia IPCS-SVx indoor series 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.

Note

- One year manufacturer warranty. Technical support for all life span.

Features

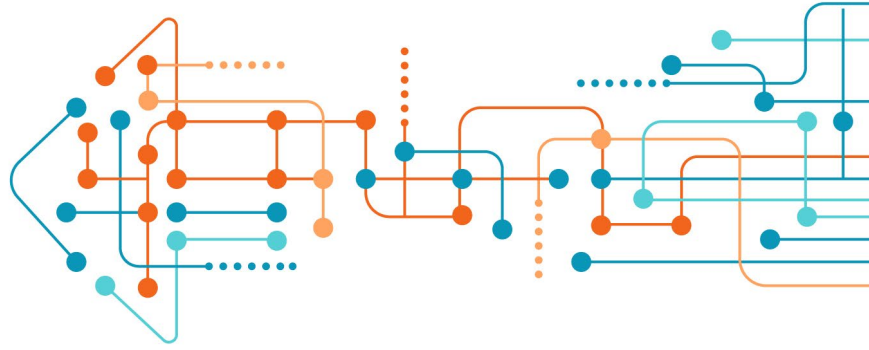
Highly-efficient Sensing Ability

- 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 (Standard Version)
- 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 (Low & Wide Versions)
- 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
- Supports heat map functionality for analyzing foot traffic intensity and distribution
- Support 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

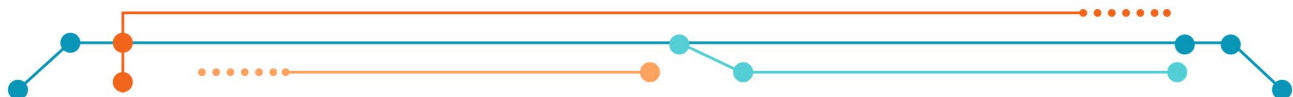
- Provide multiple connectivity options (PoE, Cellular)
- Supports RS485/DI/DO multiple interfaces and has strong scalability
- Allows quick and easy management via Vicinia Device Hub and the Vicinia IoT Platform
- High compatibility of data transmission with HTTP(s)/MQTT(s) protocol and API, supports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

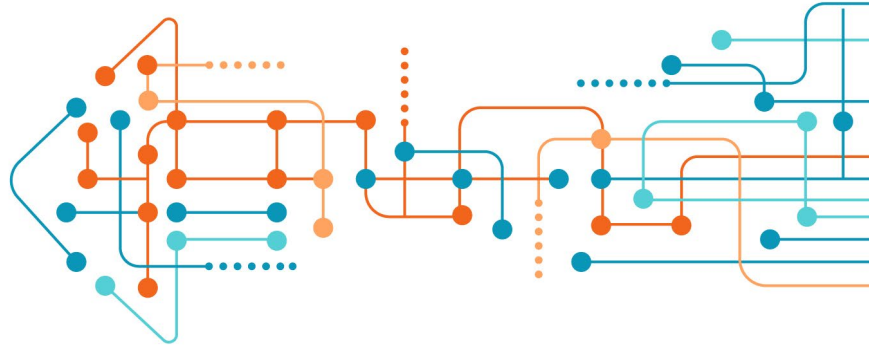




Specifications

Product				
Version	Standard Version		Low-and-Wide Version	
Model Name	Vicinia IPCS-SV1; IPCS-SV2		IPCS-SV-LW1; IPCS-SV-LW2	
Sensor	2 × 4MP Sensor (2688 × 1520)		2 × 5MP Sensor (2592 × 1744)	
Installation Height	2.2 ~ 6m		1.9 ~ 3.5m	
FoV	101° Horizontal, 70° Vertical		130° Horizontal, 117° Vertical	
Recognition Rate	Up to 99.8%			
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)		Support (Installation Height: 1.9 ~ 3.3m)	
Staff Detection				
Gender Recognition				
Group Counting	Supports			
Heat Map	Supports			
Multi-Device Stitching	Supports up to 16 devices stitching to expand coverage			
Validation	8GB			
Data Retransmission	Supports 8 × 50000 data retransmission packets			
Local Storage	Stores up to one million data records and supports exporting CSV files			
Data Transmission - Ethernet				
Model	IPCS-SV1	IPCS-SV2	IPCS-SV-LW1	IPCS-SV-LW2
Ethernet Port	1 × RJ45 10/100 Mbps (PoE PD)	1 × RJ45 10/100 Mbps	1 × RJ45 10/100 Mbps (PoE PD)	1 × RJ45 10/100 Mbps
Network Protocol	MQTT(s), HTTP(s), 802.1x, SSH, NTP, etc.	MQTT(s), HTTP(s), SSH, NTP, etc.	MQTT(s), HTTP(s), 802.1x, SSH, NTP, etc.	MQTT(s), HTTP(s), SSH, NTP, etc.
Ethernet Isolation	1.5 kV RMS	-	1.5 kV RMS	-
Data Transmission - Cellular				
Model	IPCS-SV1	IPCS-SV2	IPCS-SV-LW1	IPCS-SV-LW2
Antenna	-	Internal Antenna	-	Internal Antenna





Network	-	4G LTE (CAT1)	-	4G LTE (CAT1)
Frequency Band	-	LTE-FDD: B1/B3/B5/B7/B8/B20/B28 for EMEA +Australia / New Zealand	-	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	-	1 x Nano SIM (4FF) Slot, 1.8V/3V

Data Transmission - Other Interfaces

Power Connector	1 x DC Jack Connector
DI/DO	1/2
Serial Interface	1 x RS485 (Under Development)
Wi-Fi	IEEE 802.11 b/g/n, 2.4GHz (AP Mode for configuration)
Button	1 x Reset/Wi-Fi Button
LED Indicators	1 x RGB LED indicator

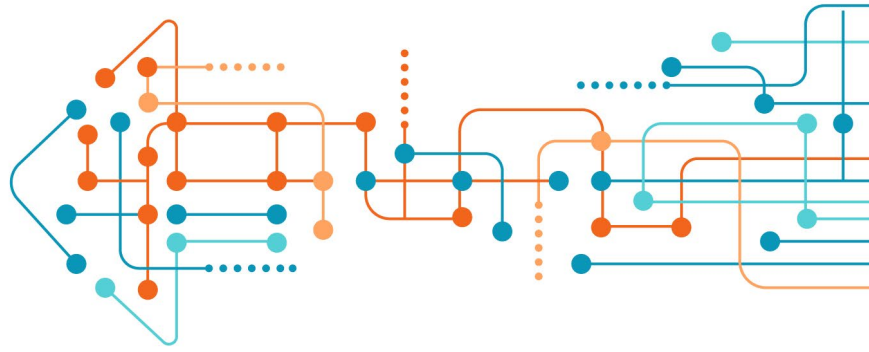
Physical Characteristics

Model	IPCS-SV1	IPCS-SV2	IPCS-SV-LW1	IPCS-SV-LW2
Power Supply	802.3af PoE or DC 12V/1A	DC 12V/1A	802.3af PoE or DC 12V/1A	DC 12V/1A
Power Consumption	Avg. 5.9W Max. 11.1W	Avg. 5.1W Max. 10W	Avg. 6.9W Max. 12W	Avg. 6.5W Max. 12W
Operating Temperature	-20°C ~ 50°C		-20°C ~ 60°C	
Relative Humidity	0 ~ 95% (Non-condensing)			
Ingress Protection	IP40			
Dimension	185 x 85 x 34 mm (7.26 x 3.35 x 1.34 in)			
Weight	275g	272g	284.4g	280.9g
Color	White or Black (Optional)			
Installation	Ceiling Mounting, Extended Ceiling Mounting & Lintel Mounting (with Optional Multifunctional Bracket)			

Detection Area - Standard Version IPCS-SV1 and ICPS-SV2

Installation Height (m)	Detection Area (m)
2.2	1.21X0.7
2.5	1.94X1.12
3.0	3.16X1.82
3.5	4.37X2.52
4.0	5.58X3.22





4.5	6.80X3.92
5.0	8.01X4.62
5.5	9.23X5.32
6.0	10.44X6.02
Detection Area - Low-and-Wide Version ICPS-SV-LW1 and ICPS-SV-LW2	
Installation Height (m)	Detection Area (m)
1.9	0.86X0.65
2.0	1.28X0.98
2.2	2.14X1.63
2.5	3.43X2.61
3.0	5.57X4.24
3.5	7.71X5.87

Dimensions (mm)

