WxS7800-333045

WiFi Dual IR Bi-directional counter Smart & RTU 2-in-1 Terminal

Product Highlights

❖ WiFi Dual IR Bi-directional counter Smart & RTU 2-in-1 Terminal,Mirrored reflection
❖ 2-in-1 smart sensor(s) and RTU terminal product
❖ Optional DC 12V power supply
❖ Optional Battery power supply (ER34615H 19,000mAh/ER34615M 13,500mAh)
❖ Number of people can be counted, direction can be identified at the same time, specular reflection principle, distance of 4 meters
❖ Up to 8 working simultaneously including sensors and controllers; Customization needed if more than 8 working at the same time
❖ RTU controlling signal and interfaces OD/PWR triggered by sensor(s) data or OTA command for solenoid valve or other devices
❖ Terminal and sensor parameters configurable with Configuration Tool running on PC

   o WiFi Global Bands Supported and SW Configurable
   o WiFi Uplink Transmission Cycle Configurable
   o Sensor Parameters Configurable
   o Sensor Data Report Cycle Configurable

❖ FOTA (Over The Air) firmware upgrade, including to upgrade loader and application images
❖ OTA (Over The Air) terminal running parameters supported
❖ Integrated internal antenna, or optional external SMA/IPEX antenna
❖ Optional (Public/Private) IoT cloud platform PolySuite iView
❖ WiFiCompliance

Specifications

Parameters	Value
Smart Terminal	
Data Report	Cross-threshold report, plus periodic report (the threshold and the periodic report cycle are both user-configurable)
Wireless	
Wireless standards	802.11 b/g/n
output power	+20 dBm in 802.11b mode
frequency range	2.4GHz-2.5GHz (2400M-2483.5M)
Data connection	UART/HSPI/I2C/I2S/Ir Remote Contorl
Wireless network mode	station/softAP/SoftAP+station
Network Protocol	IPv4, TCP/UDP/HTTP/FTP
Power	Power consumption in standby mode is less than 1.0 mW (DTIM3)
Antenna	Integrated internal antenna or external 1/2 wavelength whip antenna (SMA)
Mechanical	

Operating Temperature	-40C to +85C
IP protection	IP67
Electrical	
Supply Voltage	12VDC
Power Type	Battery power supply ER34615H/ER34615M or DC12V

Products includes following parts:

❖ PST-333045 Dual IR Bi-directional counterSensor & RTU 2-in-1 Smart Terminal, Mirrored reflection (4 meters,DC Power)

❖ WxS78xx WxS Terminal WiFi Communications Board

Configuration Tool

❖ iEdge4.0 WxS IoT Terminal products can be configured with PolySuite software-visual based Configuration Tool or CLI interface command or OTA via IoT platform, such as PolySuite PaaS platform iView.

❖ Download link http://ota.polysense.online/wincc/ConfigurationTool.rar

Product Image

PST-333045
Dual IR Bi-directional counter Sensor & RTU 2-in-1 Smart Terminal

Related Products

Product No.	Interf.	Descriptions
PST-333043	SWITCH	Dual IR Bi-directional counterSensor & RTU 2-in-1 Smart Terminal (Diffuse Reflection, 2.5 meters)
PST-333045	SWITCH	Dual IR Bi-directional counterSensor & RTU 2-in-1 Smart Terminal (Mirrored reflection, 4 meters)

Product introduction

PST-333045 is a mirror reflective photoelectric switch, which is a sensor integrating transmitter and receiver. When a detected object passes by, it reflects enough light emitted by the photoelectric switch transmitter to the receiver, so the photoelectric switch generates a switching signal.

Detection principle

Specular reflection principle; The transmitter and receiver are integrated. The photoelectric switch is opposite to the anti angle matrix reflector. The light of the transmitter is fed back to the receiver after being reflected by the reflector. The photoelectric switch and the angle matrix reflector (prism) form a closed optical path. It is a detection form by blocking or attenuating the light of the optical path.

Product features

❖ Mirror reflection photoelectric switch
❖ Super bright visual LED
❖ High sensitivity, high-precision two-way personnel counting sensor, applicable to retail stores, fast restaurants, SMB buildings etc
❖ Accurately count the quantity and identify the direction at the same time
❖ Be able to analyze valuable statistical data, such as customer traffic profile, such as peak/trough, hour, week, day/week, month, day/week
❖ Diffuse reflection, no need for reflector, easy installation
❖ Relay output

Product parameters

Parameters	
Detection distance	0-4m (from one side of the door to the other side); Reflector is required, no reflector is required within 0.5m
Light source type	Infrared light,850nm
Light source characteristics	Infrared light, modulated light
The working state displays	Green LED, and the power supply is ON
The function displays	Yellow LED, which lights up when receiving light
Adjusting knob	Detecting distance of adjusting element
Response time	2.5ms～100ms
Interface	
Output	Relay output, normally open/normally closed optional

Warranty	
Warranty period	1year
Mechanics	
Operating temperature	- 25 ℃～ 55 ℃
Operating humity	45%～85%RH
Protection level	IP67
Size	50*50*18mm
Power	
Working voltage	12～36V DC
No load current	≤ 30mA

Application

❖ In the airport, shopping malls, exhibition halls, retail stores, fast-food restaurants and other public places, real-time monitoring of customer traffic statistics.

❖ For example, customer traffic mode, peak business hours, staffing. Over time, effective real-time statistics and historical data can also be obtained on the use of laboratories, meeting rooms, sports facilities (basketball or squash, tennis courts) and smart toilets. This allows identification of whether the device is effectively used when it is idle. When the specified number of people is reached, the cleaners will be called to work.

❖ In industrial application, the product count of industrial assembly line ensures the quantity statistics of products in a certain process stage. This is very important for any manufacturer

Ordering Guide

❖ PST-333045 needs to be used together with WxS series communication boards (WxS78xx, WxS88xx, WxS98xx, WxS99xx, WxSC8xx, WxSC9xx, WxSD8xx and CxS18xx) to form intelligent IoT terminals with different communication modes;

❖ According to the specific scenario of use case, the enclosure and antenna of intelligent IoT terminal will be replaced to ensure the product quality and performance.

❖ Example of products are as follows:

   o WxS7800-333045 WiFi Series Dual IR Bi-directional counter Sensor & RTU 2-in-1 Smart Terminal
   o WxS8800-333045 LoRaWAN Series Dual IR Bi-directional counter Sensor & RTU 2-in-1 Smart Terminal
   o WxS9800-333045 NB-IoT (China) Series Dual IR Bi-directional counter Sensor & RTU 2-in-1 Smart Terminal
   o WxS9900-333045 NB-IoT (Global) Series Dual IR Bi-directional counter Sensor & RTU 2-in-1 Smart Terminal
   o WxSC800-333045 LTE Cat1 Series Dual IR Bi-directional counter Sensor & RTU 2-in-1 Smart Terminal
   o WxSC900-333045 LTE Cat1 w/GPS Series Dual IR Bi-directional counter Sensor & RTU 2-in-1 Smart Terminal
   o WxSD800-333045 LTE Cat4 Series Dual IR Bi-directional counter Sensor & RTU 2-in-1 Smart Terminal
   o CxS1800-333045 Ethernet (RJ45) Series Dual IR Bi-directional counter Sensor & RTU 2-in-1 Smart Terminal