

# 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 °C ~ 55 °C

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