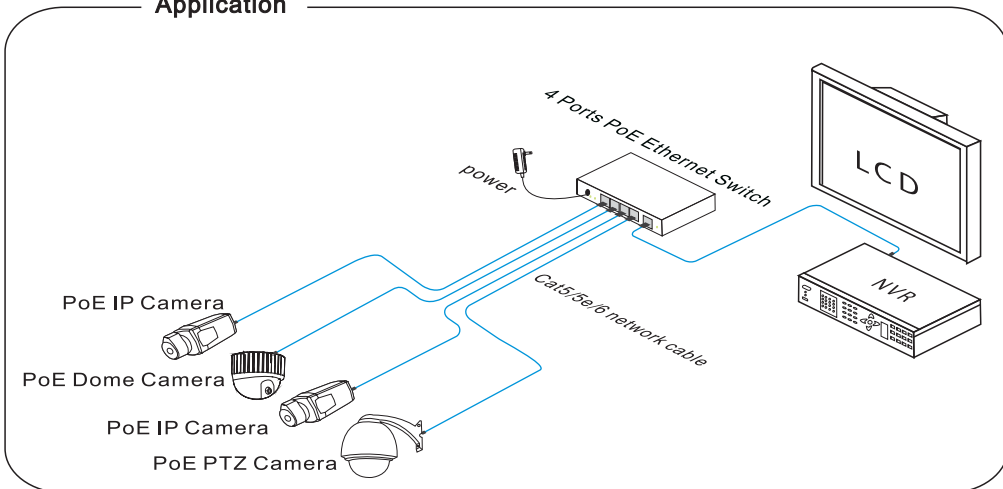# CYGNUS
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## DATASHEET
# CY-S1004-60-V1

4 ports PoE Ethernet Switch is a security surveillance Ethernet Switch which aims at Ethernet high definition surveillance and Ethernet project security system. The product fully combines the characteristics of security surveillance, provides fast packet forwarding ability and abundant backplane bandwidth, which ensures clear image and fluent transmission. Inserted static, surge protection circuit can improve product stability. The product supports one key CCTV model, can achieve VLAN, QoS priority after configuration, control the Net storm, protect the information security, prevent the viral transmission and Ethernet attack, fully satisfy the Ethernet video security surveillance system and Ethernet project needs.

## Application



**PoE IP Camera**
**PoE Dome Camera**
**PoE IP Camera**
**PoE PTZ Camera**
4 Ports PoE Ethernet Switch
power
Cat5/5e/6 network cable
LCD
NVR

## ■ F e a t u r e

- 4×10/100Base-TX Ethernet ports (PoE ports) and 1×10/100Base-TX up-link port;
- Support IEEE802.3af/at standards,Max.30W output of single port;
- One-key CCTV mode: 1~4 downlink ports can only communicate with uplink ports,extend transmission distance up to 250m(10Mbps);
- 6KV surge protection, 8KV ESD immunity and anti-interference;
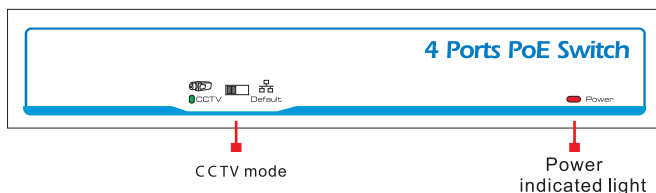- Easy & safe installation: wall-mounting, desktop,Kensington security slot;
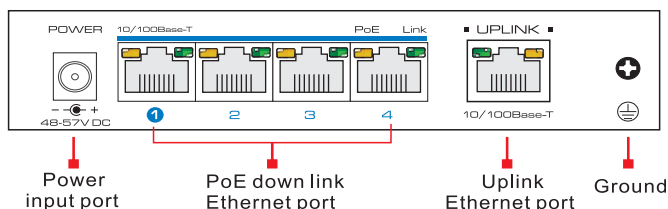- Plug-and-play.

## ⚠ N o t i c e

The transmission distance is related to the connected cable. We suggest standard Cat5e/6 network cable, so the transmission distance can up to100m!

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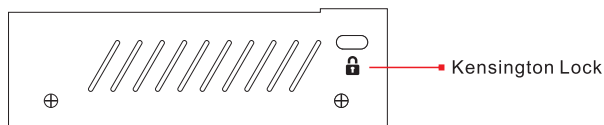
## ■ B o a r d  D i a g r a m

**Front board**

4 Ports PoE Switch

CCTV   Default                    ● Power

**Back board**

C C T V mode                          Power indicated light

POWER   10/100Base-T              PoE    Link    ■ UPLINK ■

48-57V DC    ① 2 3 4              10/100Base-T

Power input port    PoE down link Ethernet port    Uplink Ethernet port    Ground

**Side board**

Kensington Lock

**Description：**

1) The equipment must connect the ground according to the request.
2) Turn the dial switch for left, the equipment can enter CCTV mode after restart the equipment power.

## ■ I n s t a l l a t i o n  s t e p s

Please check the following items before installation, if it is missing, please contact the dealer .

● 4 ports PoE Ethernet Switch                          1pc
● Power adaptor                                        1pc
● AC power cable                                       1pc
● Accessory                                            1set
● User manual                                          1set

**Please follow the below installation steps**

1) Please turn off the signal power and display device power before installation, installation with power will damage the transmission equipment;
2) Use network cable connect PoE IP camera and  1～4 down link ports of product respectively;
3) Use a network cable connect equipment up link port and NVR or computer;
4) Turn on the power of the equipment;
5) Check if the installation is correct, equipment is in good condition,  the connection is stable, then provide power for system;
6) Ensure the Ethernet equipment with power and work properly.

## ■ Specification

| Item | | Description |
|---|---|---|
| **Power** | Power Supply | Power Adaptor |
| | Voltage Range | DC48V~54V |
| | Consumption | ＜5W |
| **Ethernet** | Speed | 1-4 port:Default:10/100Mbps; CCTV:10Mbps; Uplink port:100Mbps |
| | Transmission Distance | 1-4 port:Default:0～100m; CCTV:0~250m; UPLINK:100m |
| **Network Switch** | Ethenet Standard | IEEE 802.3/802.3u/802.3af/at |
| | Exchange Capacity | 1.0Gbps |
| | Packet Forwarding Rate | 0.74Mpps |
| | Packet Buffer | 768K |
| | MAC Address | 2K |
| **Status Indicator** | Power Light | 1pc(Red) |
| | Ethernet Port Light | 2pcs(Yellow&Green) on RJ45,yellow indicates PoE, green indicates Link/Act |
| | Surveillance Module Light | 1pc(Green), green indicates CCTV |
| **Protection Level** | Pluse Group | Level 3 Standard: IEC61000-4-4 |
| | ESD | Contact Discharge 6KV Air Discharge Level 8KV Standard: IEC61000-4-2 |
| | Anti-thunder Level | 6KV Standard:IEC61000-4-5 |
| **Working Environment** | Working Temperature | -10℃~55℃ |
| | Storage Temperature | -40℃~85℃ |
| | Humidity(Non-condesing) | 0~95% |
| **Mechanical** | Dimension(L*W*H) | 135mm× 85.6mm× 27mm |
| | Out Shell | Galvanized Sheet |
| | Color | Gray |
| | Weight | 315g |

*Specification change will not be noticed*

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## ■ Trouble Shooting

**Please follow the steps if the equipment has trouble.**
● Make sure the equipment is installed according to the manufactures installation guide.
● Confirm RJ45 cable order meets EIA/TIA568A or 568B standard.
● Every PoE port can provide PoE equipment maximum power less than 30W, please do not connect the PoE equipment with power over 30W.
● Replace the equipment with a proper functioning 4 ports PoE Ethernet Switch to check if the equipment is damaged.
● Please contact your vendor if trouble still exists.

## ■ Plug Producing Method

Instruments to be used: wire crimper, network tester. Wire sequence of RJ45 plug should conform with EIA/TIA568A or 568B.
1) Please remove 2cm long the insulating layer, and bare 4 pairs UTP cable;
2) Separate the 4 pairs UTP cable and straighten them;
3) Line up the 8 pieces of cables per EIA/TIA 568A or 568B;
4) Cut off the cables to leave 1.5cm bare wire;
5) Plug 8 cables into RJ45 plug, make sure each cable is in each pin;
6) Use the wire crimper to crimp it;
7) Repeat above 5 steps to make the another end;
8) Use network tester to test the cable if it works.

| Pin | Color |
|-----|-------|
| 1 | White/Green |
| 2 | Green |
| 3 | White/Orange |
| 4 | Blue |
| 5 | White/Blue |
| 6 | Orange |
| 7 | White/Brown |
| 8 | Brown |

EIA/TIA 568A

| Pin | Color |
|-----|-------|
| 1 | White/Orange |
| 2 | Orange |
| 3 | White/Green |
| 4 | Blue |
| 5 | White/Blue |
| 6 | Green |
| 7 | White/Brown |
| 8 | Brown |

EIA/TIA 568B

⚠ Notice

When choose RJ45 make sure if one end is EIA/TIA568A,the other end should also be EIA/TIA568A.
When choose RJ45 make sure if one end is EIA/TIA568B,the other end should also be EIA/TIA568B.