

# Hardened Cloud Easy Smart SC Fiber Switch

WK-PCES306-1A1B-H | WK-PCES310-1A1B-H



## Overview

The WIKING Hardened Cloud Easy Smart SC Fiber Switch offers 4/8 \* 1000Mbps PoE ports with 2 \* 1.25 Gigabit SC/UPC Ports, providing flexible and high-performance full-gigabit access ports and uplink Fiber ports. It also has both A and B optical ports, which not only facilitates pairing with the opposite end but also enables the formation of a cascading topology. Compared with conventional single-port optical transceivers, it offers greater flexibility in use.

The switch provides Simple, safe, and easy-to-use local WEB and remote management methods, supports smart deployment, abnormal alarm, ONVIF automatic identification of network cameras, automatic shutdown of loop ports, etc. The WIKING Hardened Cloud Easy Smart SC Fiber Switch is ideal for CCTV network solutions and projects of harsh application scenarios such as factory and park.

## Features

### Support PoE output up to 60W

Specific PoE ports can deliver up to 60W Hi-PoE output, providing robust power support for high-demand devices.

### Built-in SC/UPC connector and 20km fiber transmission

Featuring a built-in SC/UPC connector and up to 20km fiber transmission, No additional optical modules need to be purchased, reducing equipment costs while maximizing deployment flexibility. It provides a highly affordable 100-channel, 8MP CCTV cloud management system solution.

### Support Wi-Tek cloud remote management

ONVIF cameras and Wi-Tek cloud management devices can be remotely managed through the Wi-Tek cloud platform/mobile APP, making CCTV network projects truly intelligent and easy to maintain. You can easily access and manage your cameras from your phone or computer anytime, anywhere.

(Note: The EWEB channel can be created only when the easy smart switch is linked with the other type of Wi-Tek cloud management device, such as cloud L2, L3 management switch, gateway, wireless AP, etc.)

## **ONVIF-based IPC Detection and Automatic Topology Mapping**

Effortlessly discover ONVIF IPCs and visualize their connections under the switch via the cloud platform, enabling intuitive network management and faster deployment.

## **-30~65°C Operating Temperature**

-30~65°C working temperature design, makes it meet the requirement of harsh application environment.

## **Automatic Loop Prevention**

By default, the switch enables port loop detection. When a loop occurs on the switch, the port which caused the loop will be closed in time to enable the switch to operate properly and maintain service continuity.

## **Intelligent Operation and Maintenance**

Abnormal alarm can help you locate problems quickly, making your operation and maintenance easier.

# Specifications



| Model                   | WK-PCES306-1A1B-H                                                                                                      | WK-PCES310-1A1B-H                                                                |
|-------------------------|------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| Hardware Specifications |                                                                                                                        |                                                                                  |
| Interfaces              |                                                                                                                        |                                                                                  |
| Downlink Ports          | 4 * 10/100/1000Mbps RJ45 Ports                                                                                         | 8 * 10/100/1000Mbps RJ45 Ports                                                   |
| Uplink Ports            | 1 * 1.25Gbps SC/UPC A Port<br>1 * 1.25Gbps SC/UPC B Port                                                               | 1 * 1.25Gbps SC/UPC A Port<br>1 * 1.25Gbps SC/UPC B Port                         |
| SC/UPC Features         | Working Wavelength: A: TX1310nm, RX1550nm B: TX1550nm, RX1310nm                                                        |                                                                                  |
|                         | Average transmitted optical power: -9~0dBm                                                                             |                                                                                  |
|                         | Receiving sensitivity: -27dBm                                                                                          |                                                                                  |
|                         | Transmission distance: 20km                                                                                            |                                                                                  |
| PoE                     |                                                                                                                        |                                                                                  |
| PoE Port                | Port 1-4                                                                                                               | Port 1-8                                                                         |
| PoE Standard            | Port 1: Hi-PoE 60W<br>Port 2-4: 802.3af/at 30W                                                                         | Port 1-2: Hi-PoE 60W<br>Port 3-8: 802.3af/at 30W                                 |
| PoE Pin Assignment      | Hi-PoE(60W): 1/2(+), 3/6(-), 4/5(+), 7/8(-)<br>802.3af/at PoE: 1/2(+), 3/6(-)                                          |                                                                                  |
| PoE Power               | 60W Max. for port 1<br>30W Max. for port 2-4<br>60W Max. for PoE power budget                                          | 60W Max. for port 1-2<br>30W Max. For port 3-8<br>110W Max. for PoE power budget |
| Performance             |                                                                                                                        |                                                                                  |
| Flash                   | 4MB                                                                                                                    |                                                                                  |
| Switch Property         |                                                                                                                        |                                                                                  |
| Standards and Protocols | IEEE802.3,<br>IEEE802.3u,<br>IEEE802.3ab,<br>IEEE802.3z,<br>IEEE802.1q,<br>IEEE802.3af,<br>IEEE802.3at,<br>IEEE802.3ad |                                                                                  |

Note: The PoE power budget calculation is based on laboratory testing. The actual PoE power budget is not guaranteed and may vary due to power supply, client limitations, and environmental factors.

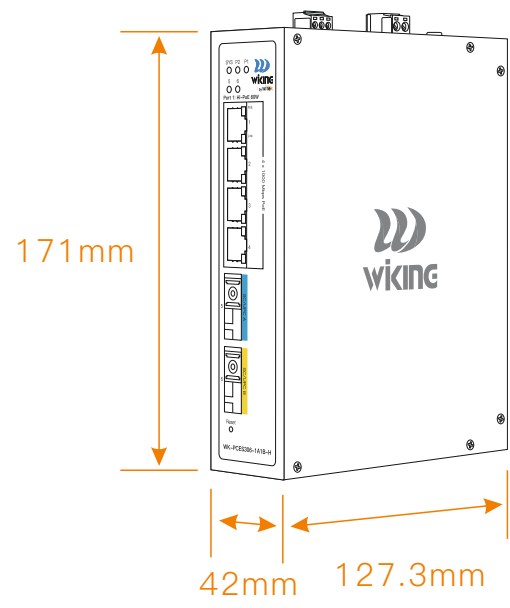
| Model                    | WK-PCES306-1A1B-H                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | WK-PCES310-1A1B-H                                |  |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------|--|
| Forwarding Mode          | Store and Forward                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |                                                  |  |
| Switching Capacity       | 12Gbps                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | 20Gbps                                           |  |
| Packet Forwarding Rate   | 8.93Mpps                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  | 14.88Mpps                                        |  |
| MAC Address Table        | 2K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | 8K                                               |  |
| Packet Buffer Memory     | 16KB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | 64KB                                             |  |
| Jumbo Frame              | 9K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                  |  |
| Power Supply             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |                                                  |  |
| Input Power              | PWR1/2: Non-PoE: 12-57V<br>PoE: 44-57V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                  |  |
| Power Consumption        | Idle: 2.1W<br>100% Traffic Rate with PoE: 62.1W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | Idle: 2.5W<br>100% Traffic Rate with PoE: 112.5W |  |
| Power Adapter            | DC 52V 1.25A 65W max.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | DC 52V 2.3A 120W max.                            |  |
|                          | Operating Temperature: 0°C to 40°C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                  |  |
| Physical Characteristics |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |                                                  |  |
| LED Indicators           | <b>P1/P2(Green):</b><br>Solid On: The device power on is normal<br>Off: The device is power off or failed<br><b>SYS (Green):</b><br>Blinking: The system is working normally<br>Solid On/Off: The system is being started or abnormal<br><b>PoE (Orange):</b><br>Solid On: There is a PoE PD connected to be port, which supply power successfully<br>Off: No PoE powered device (PD) connected<br><b>Link (Green):</b><br>Solid On: Port connected<br>Off: Port disconnected<br>Blinking: Data transmission<br><b>SC/UPC Indicator</b><br>Solid on: Port connected<br>Blinking: Data transmission<br>Off: Port disconnected |  |                                                  |  |
| Switch Dimension(W*D*H)  | 171*127.3*42mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | 171*127.3*42mm                                   |  |
| Package Dimension(W*D*H) | 212*249*71mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | 212*249*71mm                                     |  |
| Weight                   | Net Weight: 0.6kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | Net Weight: 0.7kg                                |  |
|                          | Package Weight: 1.1kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Package Weight: 1.3kg                            |  |
| Installation             | DIN-rail, Wall-mount and Desktop                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                                                  |  |

| Model                 |                | WK-PCES306-1A1B-H                                                | WK-PCES310-1A1B-H |
|-----------------------|----------------|------------------------------------------------------------------|-------------------|
| Button                |                |                                                                  |                   |
| Reset                 |                | Hold for >5 sec. to restore factory default                      |                   |
| Fan Quantity          |                | Fanless                                                          |                   |
| Environmental         |                |                                                                  |                   |
| Reliability           | Surge Immunity | IEC 61000-4-5<br>Common mode: ±4kV<br>Differential mode: ±2kV    |                   |
|                       | ESD Protection | IEC 61000-4-2<br>Contact discharge: ±8kV<br>Air discharge: ±15kV |                   |
| Operating Temperature |                | -30°C to 65°C(-22°F to 149°F)                                    |                   |
| Operating Humidity    |                | 10%~90% RH no condensation                                       |                   |
| Storage Temperature   |                | -40°C to 70°C(-40°F to 158°F)                                    |                   |
| Storage Humidity      |                | 10%~90% RH no condensation                                       |                   |
| Certification         |                |                                                                  |                   |
| Certification         |                | CE, FCC, RoHS, UKCA, RCM                                         |                   |

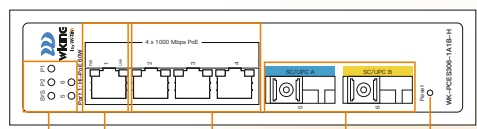
| Model             | WK-PCES306-1A1B-H                                                    | WK-PCES310-1A1B-H |
|-------------------|----------------------------------------------------------------------|-------------------|
| Software Features |                                                                      |                   |
| System Settings   | Device Info                                                          |                   |
|                   | IP Settings                                                          |                   |
|                   | User Management                                                      |                   |
|                   | Firmware Upgrade                                                     |                   |
|                   | Configuration Backup                                                 |                   |
|                   | Reset                                                                |                   |
|                   | Save Configuration                                                   |                   |
|                   | Reboot                                                               |                   |
|                   | Temperature Sensor Data                                              |                   |
| Switch Settings   | Port Settings                                                        |                   |
|                   | Port Statistics                                                      |                   |
|                   | Storm Control                                                        |                   |
|                   | Port Mirroring                                                       |                   |
|                   | Port Isolation                                                       |                   |
|                   | Port Bandwidth Control                                               |                   |
|                   | Link Aggregation                                                     |                   |
|                   | Loopback Detection                                                   |                   |
|                   | MAC Search                                                           |                   |
|                   | Static/Filter MAC                                                    |                   |
|                   | MAC Table                                                            |                   |
| VLAN Settings     | Port-based VLAN                                                      |                   |
|                   | VLAN Range: 1-4094 (Only 8 VLANs can be configured at the same time) |                   |
| PoE Settings      | PoE port disable                                                     |                   |
|                   | PoE Watchdog                                                         |                   |
|                   | Extend PoE                                                           |                   |
|                   | Port PoE Reboot                                                      |                   |
| ONVIF             | Onvif Detect                                                         |                   |
| Cloud Settings    | MQTT Client                                                          |                   |
|                   | Wi-Tek Devices Discovery Table                                       |                   |

# WK-PCES306-1A1B-H

## Dimensions (mm)



## Front Panel



### LED Indicators

1 \* 10/100/1000Mbps 60W Hi-PoE Port

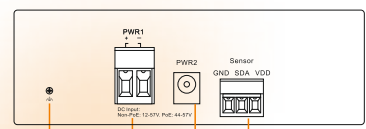
3 \* 10/100/1000Mbps 802.3af/at 30W PoE+ Ports

2 \* 1.25Gbps SC/UPC A/B Ports

(A: TX1310nm, RX1550nm B: TX1550nm, RX1310nm)

### Reset Button

## Rear Panel



### Grounding

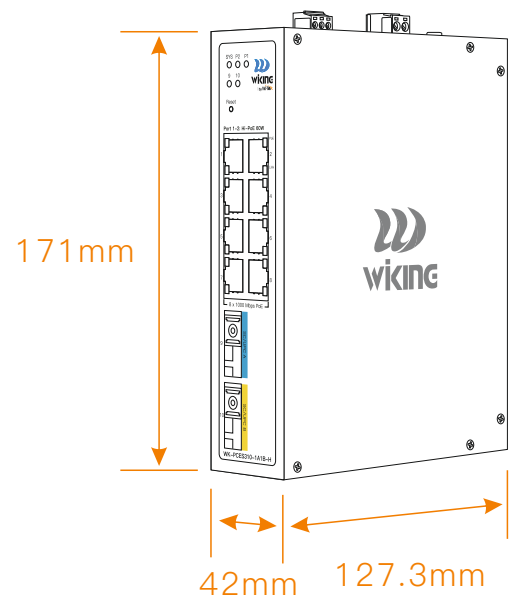
DC 44-57V PoE Power1 Input

DC 44-57V PoE Power2 Input(Power Adapter Included )

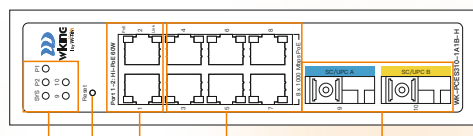
Sensor Input(Sensor Not Included)

# WK-PCES310-1A1B-H

## Dimensions (mm)

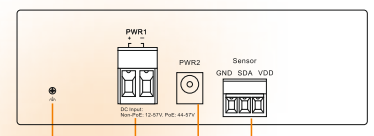


## Front Panel



- LED Indicators
- Reset Button
- 2 \* 10/100/1000Mbps 60W Hi-PoE Ports
- 6 \* 10/100/1000Mbps 802.3af/at 30W PoE+ Ports
- 2 \* 1.25Gbps SC/UPC A/B Ports  
(A: TX1310nm, RX1550nm B: TX1550nm, RX1310nm)

## Rear Panel



- Grounding
- DC 44-57V PoE Power1 Input
- DC 44-57V PoE Power2 Input(Power Adapter Included )
- Sensor Input(Sensor Not Included)

# Package Contents

Welcome to order our products. After purchasing, you will receive:

| Items                       | Quantity |
|-----------------------------|----------|
| Switch                      | 1 pcs    |
| DIN–Rail Mounting Accessory | 1 set    |
| Quick Installation Guide    | 1 pcs    |
| Power Adapter               | 1 pcs    |
| Power cord                  | 1 pcs    |
| Phoenix Terminal            | 1 set    |



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Technical Support



Cloud Management



Company Website