# 1\*100/1000 base optical+1\*100/1000 base **R.I45**

#### **Industrial POE/Non POE Switch**





#### **OProduct Feature**

- Quality integrated optoelectronic modules provide excellent optical and electrical properties
- Ensures reliable data transmission and long service life
- Supports double or half duplex with auto-negotiation
- The network port supports automatic cross recognition
- Embedded store and forward system, supports a variety of protocols
- Complies with industrial operation standards, the average trouble-free working time is 300,000hrs
- Non-POE Power: DC 12-52V reverses connection protection POE Power: DC 48-57V reverses connection protection
- Uses SC/FC/ST/SFP fiber interfaces
- Lightning surge protection (Power): 5000A (8/20μs)

## OProduct description

ODOT-ES311 series is a series of 1\*100/1000 base FX port + 1\*100/1000 base Ethernet port unmanaged industrial Ethernet switch, which supports 1 pc of 10Base-T/100/1000Base-TX Ethernet port and 1 pc of 100/1000Base-X fiber port, with POE or Non-POE functions. It conforms to FCC, CE and ROHS standards. And its WTP range is - 40 ~ 85 °C with robust design and can adapt to various kinds of rugged environment. It can also be conveniently placed in a compact control panel. With the Din-rail, wide Temperature Range Design and a shell of IP40 plus LED indicator, these cause ODOT-ES311 series to become a plug and play industrial level device and it could provide reliable and convenient solution for user's Ethernet device networking.

## Product technology parameter

**Product Name:** 

**ODOT-ES311F Series** 

1\*100M Ethernet + 1\*100M FX Industrial Ethernet Switch

**ODOT-ES311G-SFP Series** 

1\*1000M Ethernet + 1\*1000M FX Industrial Ethernet Switch RJ45 Port:

 $10/100\ or\ 1000\ BaseT$  (X) Automatically detects, Full/Half

duplex Auto sense MDI/MDI-X

**FX Port:** 

100 or 1000BaseFX Port (SC/FC/ST/SFP optional)

**Ethernet Standard:** 

**ODOT-ES311F Series** 

IEEE802.3 10BASE-T; IEEE802.3i 10Base-T; IEEE802.3u;

100Base-TX/FX;

IEEE802.3ab 1000Base-T; IEEE802.3z 1000Base-X;

IEEE802.3x;

**ODOT-ES311G-SFP** Series

IEEE802.3 10BASE-T; IEEE802.3i 10Base-T; IEEE802.3u;

100Base-TX/FX;

IEEE802.3ab 1000Base-T; IEEE802.3z 1000Base-X;

IEEE802.3x;

**Working Environment:** 

Working Temperature: -40 $\sim$ 85 °C (-40 $\sim$ 185 °F)

Storage Temperature: -40 $\sim$ 85 °C (-40 $\sim$ 185 °F)

Relative Humidity: 5%~95%(No condensation)

Industrial Standard:

EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A

EMS:

IEC(EN)61000-4-2(ESD): ±8kV contact discharge,±15kV air discharge

 $IEC(EN)61000-4-3(RS): 10V/m(80\sim1000MHz)$ 

IEC(EN)61000-4-4(EFT): Power line: ±4kV; Data line: ±2kV

IEC(EN)61000-4-5(Surge): Power line: ±4kV CM/±2kV DM; Data line: ±2kV

IEC(EN)61000-4-6(The radio frequency transmission):  $3V(10kHz\sim$ 

 $150 \mathrm{kHz}$ ), $10 \mathrm{V} (150 \mathrm{kHz} \sim 80 \mathrm{MHz})$ 

IEC(EN)61000-4-16(Common-mode transmission):30V cont. 300V,1s

IEC(EN )61000-4-8

Shock: IEC 60068-2-27

Freefall : IEC 60068-2-32

Vibration: IEC 60068-2-6

**Switch Attribute:** 

**ODOT-ES311F** Series

Application Level: Layer 2

Backboard total bandwidth: 1.52Gbps

Device packet forwarding rate: 1.13088Mpps

MAC Address table size: 1K

Packet buffer size: 512K

Switching delay<3µs

Switch method: storing - forwarding

Power Consumption: <3W

**ODOT-ES311G-SFP Series** 

Application Level: Layer 2

Backboard total bandwidth: 15.2Gbps

Device packet forwarding rate: 11.3056Mpps

MAC Address table size: 8K

Packet buffer size: 1M

Switching delay<4µs

Switch method: storing - forwarding

Power Consumption: \( \lambda \) W

Mechanic:

Shell: IP40, metal shell

Installation: DIN-rail, wall-mounted

Heat dissipation: Natural cooling without fans

Weight: 0.36Kg

Size: 118 x 86 x 39mm (LxWxH)

Power supply:

Non-POE switches

Input voltage: DC12-52V(Dual power redundancy backup)

Accessed Terminal: Phoenix terminal

Supports dual power redundancy

Supports built-in overcurrent 4.0A protection

Supports reversed polarity protection

POE switches

Input voltage: DC48-57V(Dual power redundancy backup)

Accessed Terminal: Phoenix terminal

Supports dual power redundancy

Supports built-in overcurrent 4.0A protection

Supports reversed polarity protection

#### LED indicator:

Power indicator: PWR

Interface indicator: Electrical Port and Optical port (Link/ACT)

**Protection Level:** 

IP40

Certificate:

Certification: CE,FCC,ROHS,ISO9001: 2008 Ministry of

Information network

permit and Inspection report of the Ministry of Public Security

Security: UL508

Mean free error time:

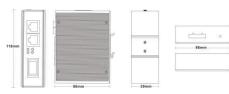
300,000 hours

Guarantee:

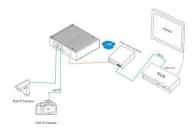
5 years

## ©Production dimension

#### Lx W x H (mm): 118 x 86x 39mm



## **OProduct application diagram**



## Ordering model information

Model		Description
ODOT-ES311F-SC2		1*100base optical port +1*100base Ethernet port, SC Connector, MM DX, 2KM, Power-off alarm, Din Rail, DC12~52V Power
ODOT-ES311F-SC20		1*100base optical port +1*100base Ethernet port, SC Connector, SM DX, 20KM, Power-off alarm, Din Rail, DC12~52V Power
ODOT-ES311F-SC20/A/B		1*100base optical port +1*100base Ethernet port, SC Connector, SM SX, 20KM, Power-off alarm, Din Rail, DC12~52V Power
ODOT-ES311FP-SC2		1*100base optical port +1*100base Ethernet port, SC Connector, MM DX, 2KM, Power-off alarm, Din Rail, DC48~57V Power
ODOT-ES311FP-SC20		1*100base optical port +1*100base Ethernet port, SC Connector, SM DX, 20KM, Power-off alarm, Din Rail, DC48~57V Power
ODOT-ES311FP-SC20/A/B		1*100base optical port +1*100base Ethernet port, SC Connector, SM SX, 20KM, Power-off alarm, Din Rail, DC48~57V Power
ODOT-ES311F-FC20/A/B		1*100base optical port +1*100base Ethernet port, FC Connector, SM SX, 20KM, Power-off alarm, Din Rail, DC12~52V Power
ODOT-ES311FP-FC20/A/B		1*100base optical port +1*100base Ethernet port, FC Connector, SM SX, 20KM, Power-off alarm, Din Rail, DC48~57V Power
Power Adapter	ZX5121-DC	12V/1A, Suitable for non-POE industrial switch series.
	ZX5241-DC	24V/1A, Suitable for non-POE industrial switch series.
	ZX5521-DC	52V/1A, Suitable for 1 port limited POE power supply and non-POE industrial switch series

Model		Description
ODOT-ES311G-SFP		1*1000base optical port +1*1000base Ethernet port, SFP Connector (without SFP module), Power-off alarm, Din Rail, DC12~52V Power
ODOT-ES311G-SC20		1*1000base optical port +1*1000base Ethernet port, SC Connector, SM DX, 20KM, Power-off alarm, Din Rail, DC12~52V Power
ODOT-ES311G-SC2		1*1000base optical port +1*1000base Ethernet port, SC Connector, MM DX, 20KM, Power-off alarm, Din Rail, DC12~52V Power
ODOT-ES311G-SC20/A/B		1*1000base optical port +1*1000base Ethernet port, SC Connector, SM SX, 20KM, Power-off alarm, Din Rail, DC12~52V Power
ODOT-ES311G-FC20/A/B		1*1000base optical port +1*1000base Ethernet port, FC Connector, SM SX, 20KM, Power-off alarm, Din Rail, DC12~52V Power
ODOT-ES311GP-SC20		1*100base optical port +1*100base Ethernet port, SC Connector, SM DX, 20KM, Power-off alarm, Din Rail, DC48~57V Power
ODOT-ES311GP-SC2		1*1000base optical port +1*1000base Ethernet port, SC Connector, MM DX, 20KM, Power-off alarm, Din Rail, DC48~57V Power
ODOT-ES311GP-SC20/A/B		1*1000base optical port +1*1000base Ethernet port, SC Connector, SM SX, 20KM, Power-off alarm, Din Rail, DC48~57V Power
ODOT-ES311GP-FC20/A/B		1*1000base optical port +1*1000base Ethernet port, FC Connector, SM SX, 20KM, Power-off alarm, Din Rail, DC48~57V Power
ODOT-ES311GP-SFP		1*1000base optical port +1*1000base Ethernet port, SFP Connector (without SFP module), Power-off alarm, Din Rail, DC48~57V Power
Power Adapter	ZX5121-DC	12V/1A, Suitable for non-POE industrial switch series.
	ZX5241-DC	24V/1A, Suitable for non-POE industrial switch series.
	ZX5521-DC	52V/1A, Suitable for 1 port limited POE power supply and non-POE industrial switch series