1*100/1000 base optical+2*100/1000 base RJ45

Industrial POE/Non POE Switch

◎**Product 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)

◎**Product description**

　　ODOT-ES312F series is a series of 1*100/1000 base FX port + 2*100/1000 base Ethernet port unmanaged industrial Ethernet switch, which supports 2 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 ℃ 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-ES312F 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-ES312F-SC2

1*100base optical + 2*100base RJ45 Unmanaged Industrial Non-POE Switch

ODOT-ES312FP-SC2

1*100base optical + 2*100base RJ45 Unmanaged Industrial POE Switch

ODOT-ES312G-SC2

1*1000base optical + 2*1000base RJ45 Industrial Non-POE Switch

ODOT-ES312GP-SFP

1*1000base optical + 2*1000base RJ45 Industrial POE Switch

RJ45 Port：

10/100 or 1000 BaseT（X） Automatically detects，Full/Half duplex Auto Negotiation MDI/MDI-X

FX Port：

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

Ethernet Standard：

ODOT-ES312F-SC2/ ODOT-ES312G-SC2

IEEE802.3 10BASE-T; IEEE802.3i
10Base-T;IEEE802.3u;100Base-TX/FX;
IEEE802.3ab 1000Base-T; IEEE802.3z 1000Base-X ;
IEEE802.3x;

ODOT-ES312FP-SC2
IEEE802.3 10BASE-T; IEEE802.3i
10Base-T;IEEE802.3u;100Base-TX/FX;

IEEE802.3ab1000Base-T;IEEE802.3z

1000Base-X;IEEE802.3x; IEEE802.3af; IEEE802.3at;

ODOT-ES312GP-SFP
IEEE802.3-10BaseT;IEEE802.3u-100BaseTX/100Base-FX;IEEE802.3x-Flow Control;
IEEE802.3z-1000BaseLX; IEEE802.3ab-1000BaseTX;
IEEE802.1abLogical Link Discovery Protocol;
IEEE802.1D-Spanning Tree Protocol;IEEE802.1w-Rapid Spanning Tree Protocol; APS
IEEE802.1Q -VLAN Tagging; IEEE802.1p -Class of Service;IEEE802.1X-Port Based Network Access Control

Working Environment ：

Working Temperature：-40～85 ℃（-40～185 ℉）

Storage Temperature: -40～85 ℃（-40～185 ℉）

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(80～1000MHz)

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～150kHz),10V(150kHz～80MHz)

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-ES312F-SC2

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-ES312FP-SC2

Application Level：Layer 2

Backboard total bandwidth：1.52Gbps

Device packet forwarding rate：1.130912Mpps

MAC Address table size：1K

Packet buffer size：512K   Switching delay＜3μs

Switch method: storing – forwarding   Power Consumption：〈3W

ODOT-ES312G-SC2

Application Level：Layer 2   Backboard total bandwidth：15.2Gbps

Device packet forwarding rate: 11.3056Mpps

MAC Address table size：8K

Packet buffer ：1M   Switching delay＜4μs

Switch method: storing - forwarding

Power Consumption：〈3W

ODOT-ES312GP-SFP

Application Level：Layer 2   Backboard total bandwidth：15.2Gbps

Device packet forwarding rate： ：11.3088Mpps

MAC Address table size：1K

Packet buffer ：1M   Switching delay＜3μs

Switch method: storing - forwarding

Power Consumption：〈3W

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
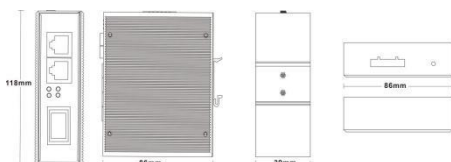
Security：UL508

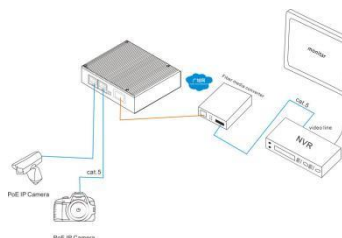**Mean free error time：**

300,000 hours

Guarantee：

5 years

◎Production dimension

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

◎Product application diagram

Model		Description
ODOT-ES312F-SC20		1*100base optical port +2*100base ethernet port, SC Connector, SM DX, 20KM, Power-off alarm, Din Rail, DC12~52V Power
ODOT-ES312F-SC2		1*100base optical port +2*100base ethernet port, SC Connector, MM DX, 2KM, Power-off alarm, Din Rail, DC12~52V Power
ODOT-ES312F-SC20/A/B		1*100base optical port +2*100base ethernet port, SC Connector, SM SX, 20KM, Power-off alarm, Din Rail, DC12~52V Power
ODOT-ES312F-FC20/A/B		1*100base optical port +2*100base ethernet port, FC Connector, SM SX, 20KM, Power-off alarm, Din Rail, DC12~52V Power
Power Adapter	ZX5121-DC	12V/1A, suitable for non-POE industrial switch product series.
	ZX5241-DC	24V/1A, suitable for non-POE industrial switch product series.
	ZX5521-DC	52V/1A, suitable for 1-port POE power supply and non-POE industrial switch product series

Model		Description
ODOT-ES312FP-SC20		1*100base optical port +2*100base ethernet port, SC Connector, SM DX, 20KM, Power-off alarm, Din Rail, DC48~57V Power
ODOT-ES312FP-SC2		1*100base optical port +2*100base ethernet port, SC Connector, MM DX, 2KM, Power-off alarm, Din Rail, DC48~57V Power
ODOT-ES312FP-SC20/A/B		1*100base optical port +2*100base ethernet port, SC Connector, SM SX, 20KM, Power-off alarm, Din Rail, DC48~57V Power
ODOT-ES312FP-FC20/A/B		1*100base optical port +2*100base ethernet port, FC Connector, SM SX, 20KM, Power-off alarm, Din Rail, DC48~57V Power
Power Adapter	YH54825-DC	48V/2.5A, suitable for 8-port POE power supply product series.
	YH55223-DC	52V/2.3A, suitable for 8-port POE power supply product series.

Model		Description
ODOT-ES312G-SC20		1*1000base optical port +2*1000base ethernet port, SC Connector, SM DX, 20KM, Power-off alarm, Din Rail, DC12~52V Power
ODOT-ES312G-SC2		1*1000base optical port +2*1000base ethernet port, SC Connector, MM DX, 2KM, Power-off alarm, Din Rail, DC12~52V Power
ODOT-ES312G-SC20/A/B		1*1000base optical port +2*1000base ethernet port, SC Connector, SM SX, 20KM, Power-off alarm, Din Rail, DC12~52V Power
ODOT-ES312G-FC20/A/B		1*1000base optical port +2*1000base ethernet port, FC Connector, SM SX, 20KM, Power-off alarm, Din Rail, DC12~52V Power
Power Adapter	YH5121-DC	12V/1A, suitable for non-POE industrial switch product series.
	YH5241-DC	24V/1A, suitable for non-POE industrial switch product series.
	YH5521-DC	52V/1A, suitable for 1-port POE power supply and non-POE industrial switch product series

Model		Description
ODOT-ES312GP-SC20		1*1000base optical port +2*1000base ethernet port, SC Connector, SM DX, 20KM, Power-off alarm, Din Rail, DC48~57V Power
ODOT-ES312GP-SC2		1*1000base optical port +2*1000base ethernet port, SC Connector, MM DX, 2KM, Power-off alarm, Din Rail, DC48~57V Power
ODOT-ES312GP-SC20/A/B		1*1000base optical port +2*1000base ethernet port, SC Connector, SM SX, 20KM, Power-off alarm, Din Rail, DC48~57V Power
ODOT-ES312GP-FC20/A/B		1*1000base optical port +2*1000base ethernet port, FC Connector, SM SX, 20KM, Power-off alarm, Din Rail, DC48~57V Power
Power Adapter	ZX54825-DC	48V/2.5A, suitable for 8-port POE power supply product series.
	ZX55223-DC	52V/2.3A, suitable for 8-port POE power supply product series.