

#### **Product Datasheet**

# 6-Port Full Gigabit Industrial Ethernet Switch

(IND-D-U-FG-0501-N)



#### **OVERVIEW**

The IND-D-U-FG-0501-N is a full gigabit industrial Ethernet fiber switch. It is designed to meet industrial fields and systems and can operate stably for a long time in harsh environments. The IND-D-U-FG-0501-N has 5\*10/100/1000M adaptive RJ45 ports and 1\*1000M SFP fiber slot port, Each port can support full line-rate forwarding.

IND-D-U-FG-0501-N industrial Ethernet switch has excellent industrial field environment adaptability (including mechanical stability, climate adaptability, electromagnetic environment adaptability, etc.), protection level up to IP40, support for dual redundant power supply, low power consumption and fanless cooling technology, MTBF average trouble-free working time up to 35 years, 5-year warranty, unmanaged models, plug and play, no configuration, easy to use. It is suitable for industrial scenes such as intelligent transportation, rail transit, electric power, mining, metallurgy and green energy construction to form a cost-effective and stable communication network.



#### **FEATURE**

#### ■ Full gigabit Ethernet port

- ♦ A combination of Gigabit Ethernet port and Gigabit SFP port to meet the networking requirements of various scenarios.
- ♦ Support non-blocking wire-speed forwarding.
- ♦ Support full-duplex based on IEEE802.3x and half-duplex based on backpressure.

#### ■ Stable and reliable

- ♦ Low power consumption, no fan, aluminum shell.
- ♦ CCC,CE, FCC, RoHS.
- The user-friendly panel, it can show the device status through the LED indicator of PWR, Link.

#### **TECHNICAL SPECIFICATION**

Model	IND-D-U-FG-0501-N
Interface Characteris	tics
	4*10/100/1000Base-T RJ45 ports (Data)
Fixed Port	1*10/100/1000Base-T uplink RJ45 port (Data)
Tixed Fort	1*1000Base-X uplink SFP fiber slot port (Data)
	2 groups V+, V- redundant DC power interface (5P phoenix terminal)
Ethernet Port	Port 1-5 support 10/100/1000Base-T autosensing, full/half duplex
	MDI/MDI-X self-adaption
Twisted Pair	10BASE-T: Cat3,4,5 UTP(≤100 meter)



Transmission	100BASE-TX: Cat5 or later UTP(≤100 meter)  1000BASE-T: Cat5e or later UTP(≤100 meter)	
SC Slot Port	Gigabit SFP optical fiber interface, default matching optical modules  (optional order single-mode / multi-mode, single fiber / dual fiber optical module. LC)	
Optical Cable/ Distance	Multi mode: 850nm 0 - 550M, single mode: 1310nm 0 - 40KM, 1550nm 0- 120KM.	
Chip Parameter		
Network Protocol	IEEE802.3 10BASE-T, IEEE802.3i 10Base-T IEEE802.3u 100Base-TX, IEEE802.3ab 1000Base-TX IEEE802.3z 1000Base-X, IEEE802.3x	
Forwarding Mode	Store and Forward(Full Wire Speed)	
Switching Capacity	12Gbps	
Forwarding Rate@64byte	8.93Mpps	
MAC	8K	
Buffer Memory	2M	
Jumbo Frame	9.2K	
LED Indicator	Power:PWR (green), network: Link, Link/Act (yellow)	
Power		
Power Consumption	Standby<6W, Full load<10W	
Power Supply	No, optional 24V24W industrial power supply	

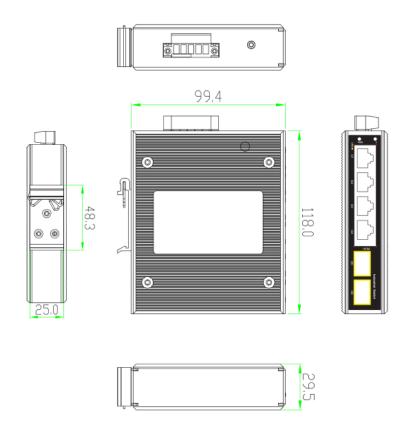


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Working Voltage	12-48VDC; 5P industrial Phoenix terminal, support anti-reverse protection.	
Physical Parameter		
Operation TEMP / Humidity	-40~+80°C;5%~90% RH Non condensing	
Storage TEMP / Humidity	-40~+85°C;5%~95% RH Non condensing	
Dimension (L*W*H)	119*100*30mm	
Net /Gross Weight	<0.7kg / <1.0kg	
Installation	Desktop, DIN rail	
Certification & Warra	nty	
Lightning protection / protection level	Lightning protection: 6KV 8/20us; Protection level: IP40 IEC61000-4-2(ESD):±8kV contact discharge,±15kV air discharge IEC61000-4-3(RS):10V/m(80~1000MHz) IEC61000-4-4(EFT): power cable:±4kV; data cable:±2kV IEC61000-4-5(Surge):power cable:CM±4kV/DM±2kV; data cable:±4kV IEC61000-4-6(radio frequency transmission):10V(150kHz~80MHz) IEC61000-4-8(power frequency magnetic field):100A/m;1000A/m ,1s to 3s IEC61000-4-9(pulsed magnet field):1000A/m IEC61000-4-10(damped oscillation):30A/m 1MHz IEC61000-4-12/18(shockwave):CM 2.5kV,DM 1kV	



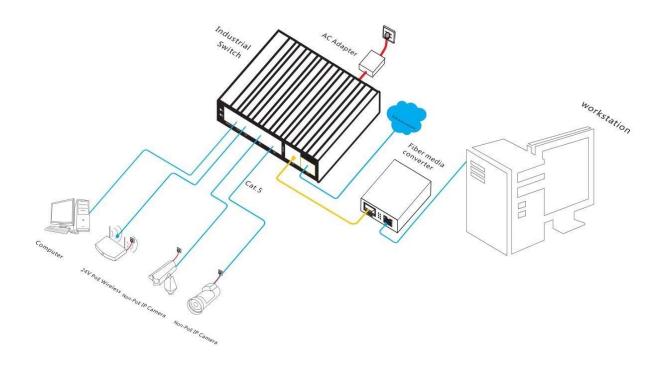
	IEC61000-4-16(common-mode transmission):30V; 300V,1s
	FCC Part 15/CISPR22(EN55022):Class A
	IEC61000-6-2(Common Industrial Standard)
	IEC60068-2-6 (anti vibration)
Mechanical Properties	IEC60068-2-27 (anti shock)
	IEC60068-2-32 (free fall)
Certification	CCC;CE mark, commercial; CE/LVD EN60950;FCC Part 15 Class B;
	RoHS;
Warranty	5 years, lifelong maintenance.

# **DIMENSION**





## **APPLICATION**



## **ORDERING INFORMATION**

Model	Description	Recommended Power Supply
IND-D-U-FG-0501-N	Unmanaged industrial Ethernet switch with 5*10/100/1000M RJ45 ports and 1*1000M SFP fiber slot port, Support DC redundant power supply connection .Support DIN rail mounting .	12/24W

Note: Industrial Ethernet switch does not match the power supply and SFP module.

### **PACKING LIST**

	CONTENT	QTY	UNIT
PACKING LIST	6-port full gigabit industrial Ethernet switch	1	SET
	User Guide	1	PC
	Warranty Card	1	PC



# **OPTICAL MODULE INFORMATION**

Product	Model	Description	Unit
	2630	SFP optical module, 1.25G, multi mode dual fiber 850nm, transmission distance: 550m, LC interface, support DDM function, support hot plug and pull.	PC
	2632	SFP optical module, 1.25G, single-mode dual fiber 1310nm, transmission distance: 20km, LC interface, support DDM function, support hot plug and pull.	PC
1.25G	2612-T	SFP optical module, 1.25G, single-mode single fiber TX1310nm/RX1550nm, transmission distance: 20km, LC interface, support DDM function, support hot plug and pull.	PC
Optical Module	2613-R	SFP optical module, 1.25G, single-mode single fiber TX1550nm/RX1310nm, transmission distance: 20km, LC interface, support DDM function, support hot plug and pull.	PC
	2612-T-G	Industrial SFP optical module, 1.25G, single-mode single fiber TX1310nm/RX1550nm, transmission distance: 20km, LC interface, support DDM function, support hot plug and pull.	PC
	2613-R-G	Industrial SFP optical module, 1.25G, single-mode single fiber TX1550nm/RX1310nm, transmission distance: 20km, LC interface, support DDM function, support hot plug and pull.	PC



	2612-T-SC	SFP optical module, 1.25G, single-mode single fiber TX1310nm/RX1550nm, transmission distance: 20km, SC interface, support DDM function, support hot plug and pull.	PC
	2613-R-SC	SFP optical module, 1.25G, single-mode single fiber TX1550nm/RX1310nm, transmission distance: 20km, SC interface, support DDM function, support hot plug and pull.	PC
Power Module	2633	1.25G SFP optical module transfers to 10/100/1000M RJ45 port.	PC

### **POWER SUPPLY SELECTION TABLE**

Product	Model	Description	Unit
12W DIN Rail Industrial Power Supply	DP12-24	Din Rail type 12W single set of output power supply; Input Voltage:AC 100V~240V 50-60H,0.35A Output Voltage:DC 24V 0.5A Operation Temperature:-40°C—+70°C	PC

# **RELATED PRODUCT**

Model	Description	
IND-D-U-FG-0101-N	Unmanaged industrial Ethernet fiber switch with 1*10/100/1000M  RJ45 port and 1*1000M SFP slot port. It can support dual DC redundant power input and DIN rail mounting.	



IND-D-U-FG-0201-N	Unmanaged industrial Ethernet fiber switch with 2*10/100/1000M RJ45 ports and 1*1000M SFP slot port. It can support dual DC redundant power input and DIN rail mounting.
IND-D-U-FG-0202-N	Unmanaged industrial Ethernet fiber switch with 2*10/100/1000M RJ45 ports and 2*1000M SFP slot ports. It can support dual DC redundant power input and DIN rail mounting.
IND-D-U-FG-0600-N	Unmanaged industrial Ethernet switch with 6*10/100/1000M RJ45 ports. It can support dual DC redundant power input and DIN rail mounting.
IND-D-U-FG-1000-N	Unmanaged industrial Ethernet switch with 10*10/100/1000M RJ45 ports. It can support dual DC redundant power input and DIN rail mounting.
IND-D-U-FG-0802-N	Unmanaged industrial Ethernet fiber switch with 8*10/100/1000M RJ45 ports and 2*1000M SFP slot ports. It can support dual DC redundant power input and DIN rail mounting.
IND-D-U-FG-1002-N	Unmanaged industrial Ethernet fiber switch with 10*10/100/1000M RJ45 ports and 2*1000M SFP slot ports. It can support dual DC redundant power input and DIN rail mounting.



## CONTACT

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