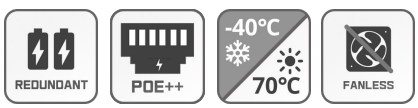
FR-7N3208 • FR-7N3208P • FR-7N3208BT

Industrial Unmanaged 8-port 10/100/1000Base-TX (Non-PoE/PoE+/PoE++)+ 2-port 1000Base-SFP Ethernet Switch with Redundant DC Power Inputs





Main Features

- Plug-and-play, non-blocking store-and-forward architecture
- Auto-negotiation and Auto-MDI/MDIX on Gigabit RJ45 ports
- IEEE 802.3x flow control for full-duplex and half-duplex backpressure
- MAC auto-learning/aging and 802.1Q VLAN transparency
- 802.3at/bt PoE (30W/90W per port)
- Operating temperature -40°C to +75°C
- Redundant DC power inputs, reverse polarity and overload protection
- High-level surge protection and fault alarm relay
- Fanless design
- DIN-Rail and wall-mount installation
- NDAA & RoHS compliant

CE FC

Protected by hardware warranty
Advance replacement. Global coverage.

View policy on Fiberroad's website.

Product	FR-7N3104	FR-7N3104P	FR-7N3104BT
Interface			
RJ45 Ports	8x10/100/1000BASE-T		
SFP Ports	2x1000BASE-X SFP Slot (Port 9 -10)		
LED Indicators	PWR;LINK/ACT;SPD		
Electrical and Mechanical			
Input Voltage	Dual 9-56VDC	Dual 9-56VDC	Dual 9-56VDC
Max. Power Consumption	7 Watts Max (without PoE load)		

Product Specifications

FR-7N3208 • FR-7N3208P • FR-7N3208BT

Product	FR-7N3208	FR-7N3208P	FR-7N3208BT
Electrical and Mechanical			
PoE Ports	\	Port 1 to 8 IEEE802.3 af/at	Port 1 to 8 IEEE802.3 af/at/bt
PoE Power Supply Type	\	End-span	
Power Supply Pin	\	1/2(+),3/6(-)	1/2(+), 3/6(-) or 4/5(+), 7/8(-)
Max Power Per Port	\	30W	90W
Max. PoE Power Budget	\	240W	240W
Surge Protection	±6kV DC, ±4kV RJ45	±6kV DC, ±6kV RJ45	
Enclosure	IP40 aluminum case		
Dimension	138 x 108 x 49mm, 0.62kg (Bare weight)		
Standards			
IEEE 802.3	10BaseT		
IEEE 802.3u	100BaseT(X) and 100BaseFX		
IEEE 802.3ab	1000BaseT(X)		
IEEE 802.3x	1000BaseSX/LX/LHX/ZX		
IEEE 802.3az	Energy Efficient Ethernet		
Switching			
Switch Architecture	Store-and-Forward		
Switch Fabric	20Gbps/non-blocking		
Forwarding Rate	1.19 Mpps(64-byte packet size)		
Packet Buffer Size	2 Mbits		
Maximum Packet Length	1500 bytes		
MAC Address Table	4K entries, automatic source address learning and aging		
Flow Control	IEEE 802.3x pause frame for full duplex, Back pressure for half duplex		
Environmental			
Operating Temperature	-40°C to +75°C (-40 to 167 °F)		

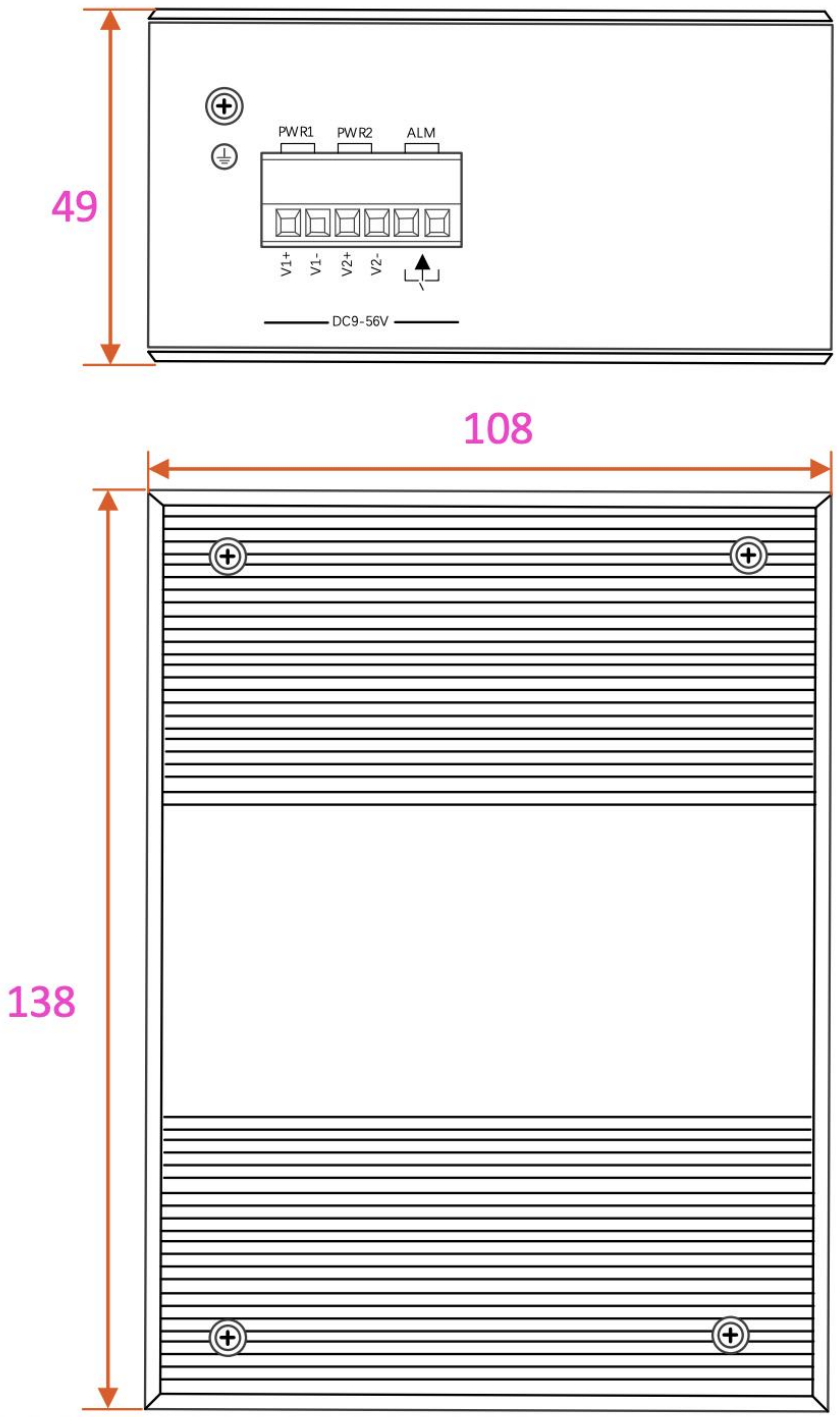
Product Specifications

FR-7N3208 • FR-7N3208P • FR-7N3208BT

Product	FR-7N3208	FR-7N3208P	FR-7N3208BT
Environmental			
Storage Temperature	-40°Cto +85°C(-40 to 185 °F)		
Operating Humidity	5%~95% (non-condensing)		
MTBF	>500,000 hours @MIL-HDBK-217F GF 25°C		
Heat Dissipation	17 BTU/h (Non-PoE), 700 BTU/h (with 240W PoE load)		
Cooling	Passive Cooling		
Noise Level	0 dBA		
Regulatory			
ISO	Manufactured in ISO-9001facility		
Safety	IEC62368-1:2020+A11:2020		
EMI	FCC Part 15B Class A, IEC 61000-3-2		
EMS	IEC61000-4-2 ESD: Contact:±8kV, Air:±15kV IEC61000-4-5 Surge: Power: ±6kV; RJ45:±4kV/±6kV(PoE)		
Shock	IEC 60068-2-27		
Free Fall	IEC 60068-2-32		
Vibration	IEC 60068-2-6		
Environmental	RoHS 2011/65/EU Annex II(EU)		

Product Specifications

Dimension (Unit: mm)



Product Specifications

Ordering Information

Available Model	Description	Input Voltage	Operating Temp.
FR-7N3208	Industrial Unmanaged 8-port 10/100/1000Base-TX + 2-port 1000Base- SFP Ethernet Switch with Redundant DC Power Inputs	Dual 9-56VDC	-40 to +75℃
FR-7N3208P	Industrial Unmanaged 8-port 10/100/1000Base-TX (PoE+) + 2-port 1000Base-SFP Ethernet Switch with Redundant DC Power Inputs		
FR-7N3208BT	Industrial Unmanaged 8-port 10/100/1000Base-TX (PoE++) + 2-port 1000Base-SFP Ethernet Switch with Redundant DC Power Inputs		

Optional Accessories (to be purchased separately)	
SFP Optical Transceiver	Please select your SFP on our SFP Modules page for details.

Package Contents	
Device	1 x Industrial Ethernet Switch
Installation Kit	1 x DIN-Rail Clip
Documentation	1 x Quick installation guide 1 x Warranty card

Specifications are subject to change without notice. Fiberroad Technology Co., Ltd. makes no warranties, either expressed or implied, regarding the information contained herein. Please contact us for the latest product information.

© Fiberroad Technology Co., Ltd. All rights reserved. | Nov 2026