

FIBERROAD

# Web Smart Industrial Ethernet Switch

Product Data Sheet

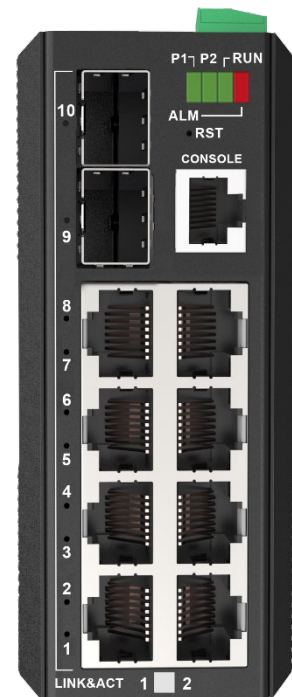


# Web Smart Semi-industrial Ethernet Switch

Introducing the formidable FR-6S3208, a revolutionary Web Smart Industrial Ethernet Switch meticulously crafted by Fiberroad to cater to the ever-evolving demands of industrial networking applications. With its cutting-edge features and unparalleled performance, this marvel is undoubtedly the epitome of excellence in the field. Aptly dubbed as the LITE model, it boasts an exceptional design tailored specifically for small-scale industrial networking requirements while remaining impressively cost-effective. Embracing industry-leading technical standards, this incomparable switch guarantees a seamless and uninterrupted Ethernet transmission that exudes unrivaled quality. No challenge is too great for this remarkable creation; it stands tall as a beacon of reliability and stability in an era where connectivity reigns supreme. So buckle up and prepare yourself for an exhilarating journey into the world of smart industrial networking with FR-6S3208 – your game-changer in every sense!

## Main Features

- 8x10/100/1000Base-T RJ45 ports,
- 2x1000Base-X SFP ports
- Support IEEE802.3x full duplex flow control and Backpressure half duplex flow control.
- Support IEEE802.3az energy-efficient Ethernet technology.
- Supports the WEB management mode, which is simple and efficient, and facilitates installation and commissioning by engineering and maintenance personnel
- Complete status indicator, working state at a glance.
- Supports port traffic statistics, port monitoring, cable detection, and loopback protection.
- Power input polarity protection design
- -20°C to +70°C Operating Temperature
- ±4kV DC, ±2kV RJ45 surge protection
- Dual DC9-56V power input
- Aluminum case, no fan design
- Installation method: DIN Rail /Wall mounting



# Product Specifications

Hardware Specifications	
Product	FR-6S3208
Copper Ports	8x10/100/1000BASE-T RJ45 Auto-MDI/MDI-X (Port 1-8)
Fiber Ports	2x100/1000BASE-X SFP Slots (Port 9 and Port 10)
Console	1x RJ45-to-RS232 Serial Port(115200)
Reset Button	<5 sec: System Reboot; > 10 sec: Factory Default
Surge Protection	±4kV DC, ±2kV RJ45
Enclosure	IP40 aluminum case
Installation	DIN-Rail and Wall-mount
Dimension	100 x 78 x 40mm
Weight	
Switching	
Switch Architecture	Store-and-Forward
Switch Fabric	36Gbps/non-blocking
Packet Buffer Size	4 Mbits
Maximum Packet Length	10K bytes
MAC Address Table	8K entries, automatic source address learning and aging
Flow Control	IEEE 802.3x pause frame for full duplex, Back pressure for half duplex
Power Supply	
Number of inputs	2
Input Voltage	DC9-56V
Power Consumption	10 Watts Max
Connector	1 removable 5-contact terminal blocks Pin 1/2 for Power 1, Pin 4/5 for Power 2
Environmental	
Operating Temperature	-20°C to +70°C (-4 to 158 °F)
Storage Temperature	-40°C~85°C (-40 to 185 °F)
Operating Humidity	5%~95% (non-condensing)
MTBF	907,476 hours @ Telcordia SR-332 Standard
Heat Dissipation	34 BTU/h (non-PoE mode)
Cooling	Passive Cooling, Fanless Design
Noise Level	0 dBA
LED Indicators	
P1 and P2	ON: Power is being supplied ; OFF: Power is not being supplied
RUN	Blinking: The system is running well
Link/ACT (Port 1 – 8)	ON: Port connection is active; Blinking: Data Transmitted; OFF: Port connection is not active
ALM	ON: Has alarm information; OFF: No alarm information

# Product Specifications

Software Specifications	Function	Description
System	System Information	
	IP Setting	Static
		DHCP Client
	Account Settings	
	Port Settings	State/Automatic/Rate/Flow Control
System Configuration	Optical Module Status	DDM Information
	IGMP	IGMP Snooping, Fast-leave, Querier
	Port Trunk	Trunk Group:4; Member ports:8
	Loop Prevention	
	Port Mirror	
	Speed Limit	Ingress/Egress, N*32Kbps
	Jumbo Frame	15K Max
	EEE Configuration	
	SNMP	SNMPv1/v2c
	Spanning Tree Configuration	STP, RSTP
	ERPS	ERPSv1
	LLDP Configuration	Tx Interval/Hold/Delay, Reinit Delay
VLAN	LLDP Neighbor	
	MTU VLAN Settings	
	Port-based VLAN Settings	
	802.1Q VLAN Setting	
	Voice VLAN	
QoS	Surveillance VLAN	
	QoS Basic	QoS Policy: SP,WRR.WFQ
Security	QoS Advanced	QoS mode: Port-based Based on 802.1p Based on DSCP
	MAC Managed	Maximum MAC number Dynamic MAC Address Table
	Storm Control	Unknown Unicast Packets Multicast Packets, Broadcast Packets
	Traffic Monitor	
	Cable Diagnostics	
	DHCP Snooping	Option 82
Tools	System Upgrade	
	Ping Tool	
	Backup Restore	
	System Reset/Reboot	
	Save Settings	

## Regulatory & Warranty

Safety	IEC/EN 62368-1
EMI	EN55032 Class A, CISPR 32 FCC Part 15B Class A
EMS	EN61000-4-2 (ESD) EN61000-4-3 (RS) EN61000-4-4 (EFT) EN61000-4-5 (Surge) EN61000-4-6 (CS) EN61000-4-8 (PFMF)
Shock	IEC 60068-2-27
Free Fall	IEC 60068-2-32
Vibration	IEC 60068-2-6
Environmental	RoHS
Warranty	3 Years, Details See: <a href="http://www.fiberroad.com">www.fiberroad.com</a>

## Package Contents

Device	1 x Industrial Ethernet Switch
Installation Kit	1 x DIN Rail Buckle
Documentation	1 x Quick installation guide 1 x Warranty card

## Accessories(Sold Separately)

### Power Supply

FR-I-40-24	DIN-rail 24 VDC power supply with 40W/1.7A, 85 to 264 VAC, or 120 to 370 VDC input, -20 to 70°C operating temperature
FR-I-60-24	DIN-rail 24 VDC power supply with 60W/2.5A, 85 to 264 VAC, or 120 to 370 VDC input, -20 to 70°C operating temperature

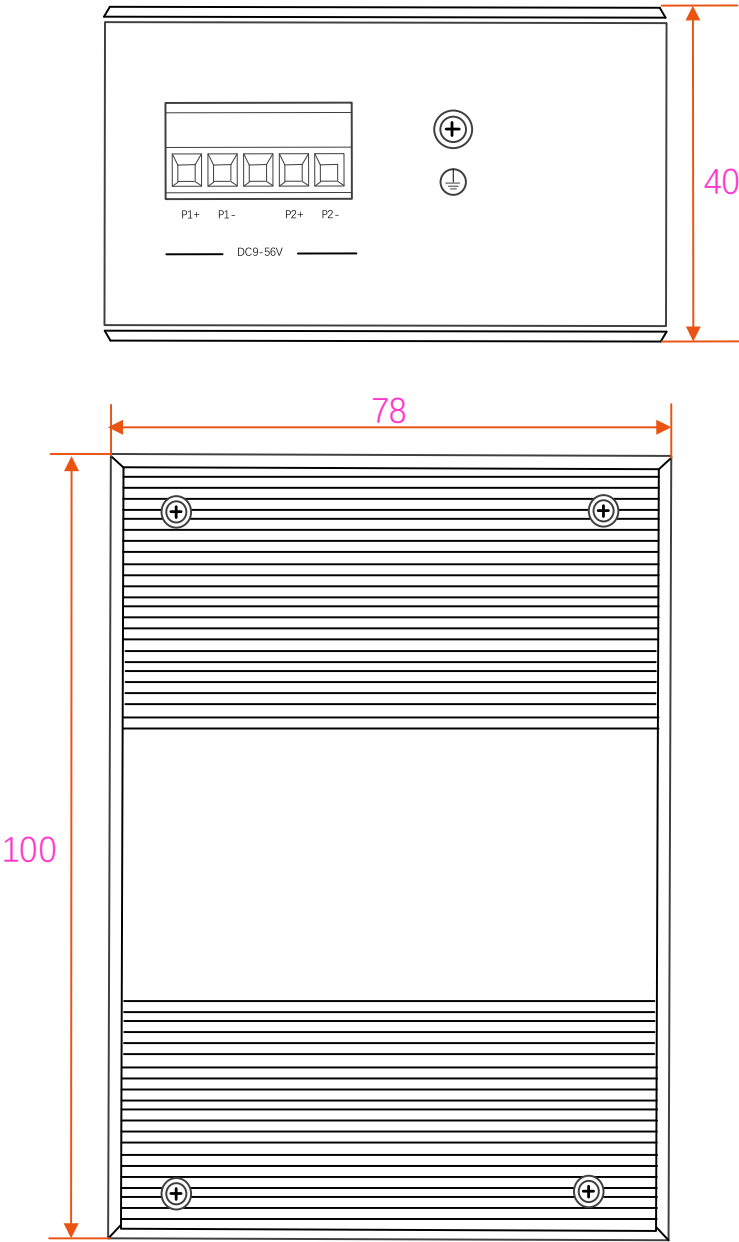
### SFP Optical Transceiver

FRSX-1L311C-I	1.25Gb/s 1310nm 10km SFP, Operating Temperature: -40°C-85°C (-40°F - 185°F)
FRSX-1L341C-I	1.25Gb/s 1310nm 40km SFP, Operating Temperature: -40°C-85°C (-40°F - 185°F)
FRSX-1L5X1C-I	1.25Gb/s 1550nm 80/100km SFP, Operating Temperature: -40°C-85°C (-40°F - 185°F)
FRSX-1L3523/5323C-I	1.25Gb/s 1310nm/1550nm 20km BiDi SFP, Operating Temperature: -40°C-85°C (-40°F - 185°F)

### Armored Fiber Patch Cable / LAN Cable

FRPC-A-LC	Armored LSZH LC UPC to LC UPC Duplex OS2 single mode 7.0mm for Outdoor Application, 1-50m
FRLC-A-CAT6	Armored Cat6 Snagless shielded(SFTP) Ethernet Network Patch Cable, 26AWG, 1000Base-T, 0.5m – 3m

Dimensions      Unit: mm



## Precautions

To avoid damage to the equipment and personal injury caused by improper use, please observe the following precautions:

- ❖ Keep the power off during installation, wear an anti-static wrist, and ensure that the anti-static wrist is in good contact with the skin to avoid potential safety hazards.
- ❖ The switch can work normally under the correct power supply. Please confirm that the power supply voltage matches the voltage indicated by the switch.
- ❖ Before powering on the switch, please make sure that the power circuit is not overloaded, so as not to affect the normal operation of the switch and even cause unnecessary damage.
- ❖ To avoid the risk of electric shock, do not open the case while the switch is working, even if it is not charged, do not open it yourself.
- ❖ Before cleaning the switch, pull out the power plug of the switch. Do not wipe with a wet cloth. Do not use liquid to clean it.
- ❖ The equipment installed in the rack is generally from bottom to top to avoid overload installation.
- ❖ Avoid placing other heavy objects on the surface of the switch to avoid accidents.

## Order Information

Model Number	10/100/1000Base-T RJ45 Port	100/1000Base-X SFP Port	Input Voltage	Operating Temp.
FR-6S3208	8	2	DC9-56V	-20 to +70°C

## Shipping

Model No.	FR-6S3208
Classification Codes	HS Code: 851762
	HTS: 8517.62.00
NDAA Compliant	Yes
Individual Gross Weight	0.46kg
Individual Package Dimension	165x150x50mm
Package Quantity	60 Units
Package Gross Weight	26.5kg
Package Dimension	535x345x470mm

The information in this document is subject to change without notice. Fiberroad has made all effects to ensure the accuracy of the information, but all information in this document does not constitute any kind of warranty. Visit our website for the most up-to-date product information

## For more information

For more information about Fiberroad Industrial Ethernet series products, Visit <https://www.fiberroad.com> or contact your local account representative.