

# 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 smallscale 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



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	$\pm$ 4kV DC, $\pm$ 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 Information	
		Static
	IP Setting	DHCP Client
System	Account Settings	
	Port Settings	State/Automatic/Rate/Flow Control
	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	N*32Kbps
System Configuration	Jumbo Frame	15K Max
	EEE Configuration	
	SNMP	SNMPv1/v2c
	Spanning Tree Configuration	STP, RSTP
	LLDP Configuration	Tx Interval/Hold/Delay, Reinit Delay
	LLDP Neighbor	
	MTU VLAN Settings	
	Port-based VLAN Settings	
VLAN	802.1Q VLAN Setting	
	Voice VLAN	
	Surveillance VLAN	
	QoS Basic	QoS Policy: SP,WRR.WFQ
QoS	QoS Advanced	QoS mode: Port-based Based on 802.1p Based on DSCP
	MAC Managed	Maximum MAC number Dynamic MAC Address Table
Security	Storm Control	Unknown Unicast Packets Multicast Packets Broadcast Packets
	Traffic Monitor	
	Cable Diagnostics	
	DHCP Snooping	Option 82
	System Upgrade	
	Ping Tool	
Tools	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	5 Years, Details See: www.fiberroad.com	

### Package Contents

Device	1x Industrial Ethernet Switch
Installation Kit	2 x Caps, plastic, for SFP Slots Or 2 x Caps, plastic, for SC fiber port Or 2 x Caps, plastic, for ST fiber port 2x Wall-Mount Kits 1x DIN Rail Buckle
Documentation	1 x Quick installation guide 1 x Warranty card 1x Product notice

### Accessories(Sold Separately)

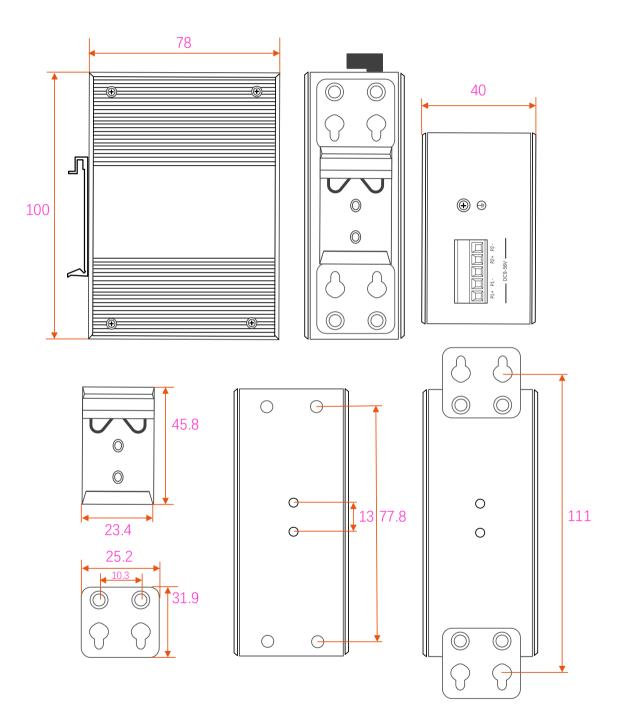
Power Supply	
FR-I-40-24	DIN-rail 24 VDC power supply with 40W/1.7A, 85 to 264 VAC, or 120 to 370 VDC input, -20 to 70°C operating temperature
FR-1-60-24	DIN-rail 24 VDC power supply with 60W/2.5A, 85 to 264 VAC, or 120 to 370 VDC input, -20 to 70°C operating temperature

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: of -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	

# Product Specifications

### 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
Classification Codes	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 <u>https://www.fiberroad.com</u> or contact your local account representative.