## FIBERROAD

# INTRINSICALLY SAFE INDUSTRIAL EMBEDDED SWITCH

Unmanaged

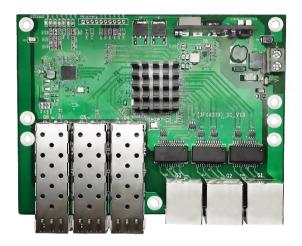
**Product Data Sheet** 

## **Intrinsically Safe Industrial Embedded Switch**

Fiberroad intrinsically safe embedded Ethernet switch is an outstanding solution for those seeking a cost-effective and reliable network switch that can be effortlessly installed and maintained in hazardous areas. With its specialized hazardous area certification, this remarkable device allows the components to be seamlessly mounted in Zone 1 or Division 1 hazardous areas while ensuring connectivity into Zone 0. Its intrinsic safety feature guarantees utmost protection against potential explosions or fires caused by electrical sparks, making it a truly dependable choice for critical environments. This cutting-edge switch not only prioritizes safety but also offers exceptional performance, enabling seamless communication and data transmission within the network infrastructure. The engineers at Fiberroad have designed this ingenious product with simplicity in mind, ensuring that even non-technical individuals can easily install and maintain it without any hassle. With its unmatched combination of reliability, affordability, ease of use, and compliance with strict safety standards, the intrinsically safe embedded Ethernet switch from Fiberroad stands out as an excellent option for those operating in hazardous areas who value both functionality and peace of mind.

## **Product Features**

- •Support 100/1000BASE-X, 10/100/1000BASE-T
- •Supports full duplex/half duplex, MDI/MDI-X automatic detection
- •No shell embedded design, can be used as a switch module embedded circuit board, can also be used as a switch
- •Intrinsically safety explosion-proof, can be used in coal mines, explosion-proof cameras or other sealed, narrow space and other environments
- •Wide working temperature design, -40°C  $\sim$  75°C, relative humidity 5 $\sim$ 95%, to be true of harsh industrial environment
- •EMC protection, surge protection, 6000V lightning protection, short circuit protection, reverse connection protection
- •Support power, port connection status LED indication
- Positioning hole installation, plug and play, exquisite and small
- •No fan, low power consumption design, good heat dissipation, to ensure long-term stable work
- •Support the power supply slow start function, effectively reduce the start instant impulse current, intrinsically high safety
- It can be upgraded and expanded with compatibility, providing a guarantee for mine information automation



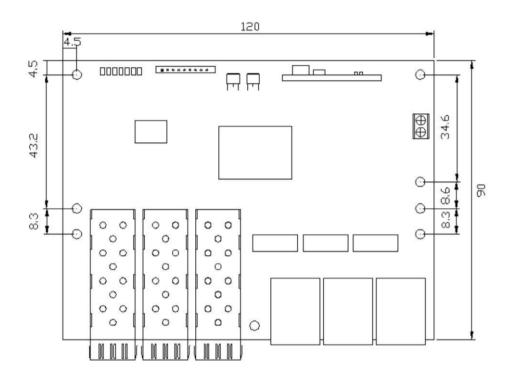


## **Product Specifications**

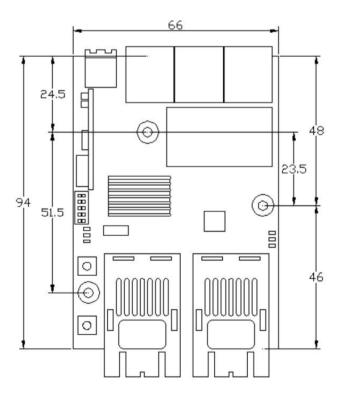
Ethernet Interface							
Model	FISE205	FISE505G	FISE306G				
Ports	2x100BASE-X 1X9 3x10/100BASE-T RJ45	2x1000BASE-X 1X9 3x10/100/1000BASE-T RJ45	3x1000BASE-X SFP 3x10/100/1000BASE-T RJ45				
Port Mode(Tx)	Auto-Negotiation Speed Full/Half Duplex Mode Auto MDI/MDI-X Connection						
Standards	802.3x、802.3u、802.3z、802.1D、802.1Q、802.1p、802.1ab						
Packet Buffer Size	512kbit	1Mbit	1Mbit				
Jumbo Frame	2k	9k	9k				
MAC Address Table	4k	4k	4k				
Transmission Mode	Store and Forward (full/half duplex mode)						
Backplane Bandwidth	1.0G	12G	12G				
Switching Latency	≤7us	≤7us	≤7us				
Physical Characteristics							
Model	FISE2	FISE306G					
Dimensions	106mmx66mmx17mm 120mmx90mmx17mm						
Installation	Embedded Hole Positioning						
Environmental							
Operating Temperature	-40°C~75°C (-40 to 167 °F)						
Operating Humidity	5%~95% (non-condensing)						
Storage Temperature	-40°C~85°C (-40 to 185 °F)						
MTBF	500,000 hours						
Power Supply							
Power Input	DC9~36V						
Connector	The 2 Pin industrial terminal, supports dual power input						
LED Indicators							
LEDs	Power Status, System Status, Fiber and RJ45 Port Link/ACT						
Connectors	Support External wire,2.0mm Pitch Connectors						
EMS Attributes							
Static Immunity	Air discharge ±8kv, contact discharge ±6kv						
Surge Impact	Power supply common mode ±2kv/ differential mode ±1kv, network port ±2kv						
Electrical transient pulse group	Power supply 1kv@5KHz, network port 0.5kv@5KHz						

## Dimensions





FISE306G



FISE205/FISE505G

### **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	10/100Base-T RJ45	10/100/1000Base-T, RJ45	100/1000Base-X	100/1000Base-X1x9	Input Voltage	Operating Temp.
FISE205	3	\	١	2	DC9-36V	-40 to +75℃
FISE505G	\	3	\	2	DC9-36V	-40 to +75℃
FISE306G	\	3	3	\	DC9-36V	-40 to +75℃

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 Smart Industrial Ethernet series products, Visit <a href="https://www.fiberroad.com">https://www.fiberroad.com</a> or contact your local account representative.