FIBERROAD

INTRINSICALLY SAFE

INDUSTRIAL EMBEDDED SWITCH

Unmanaged

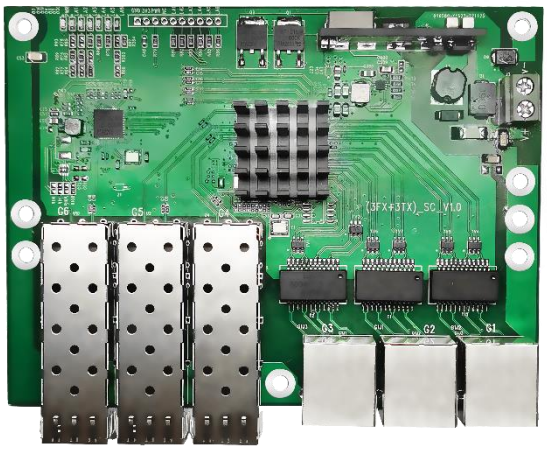
Product Data Sheet

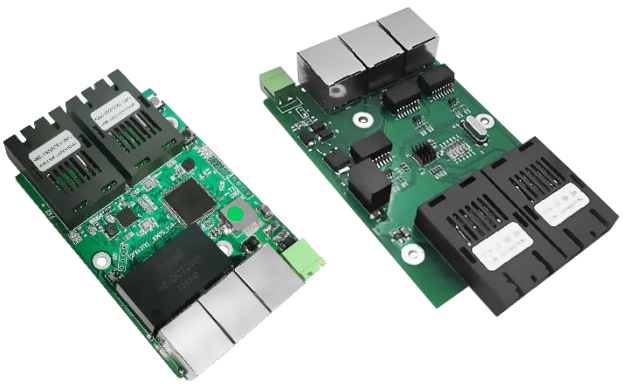
Intrinsically Safe Industrial Embedded Switch

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℃ ~ 75℃, relative humidity 5~95%, 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



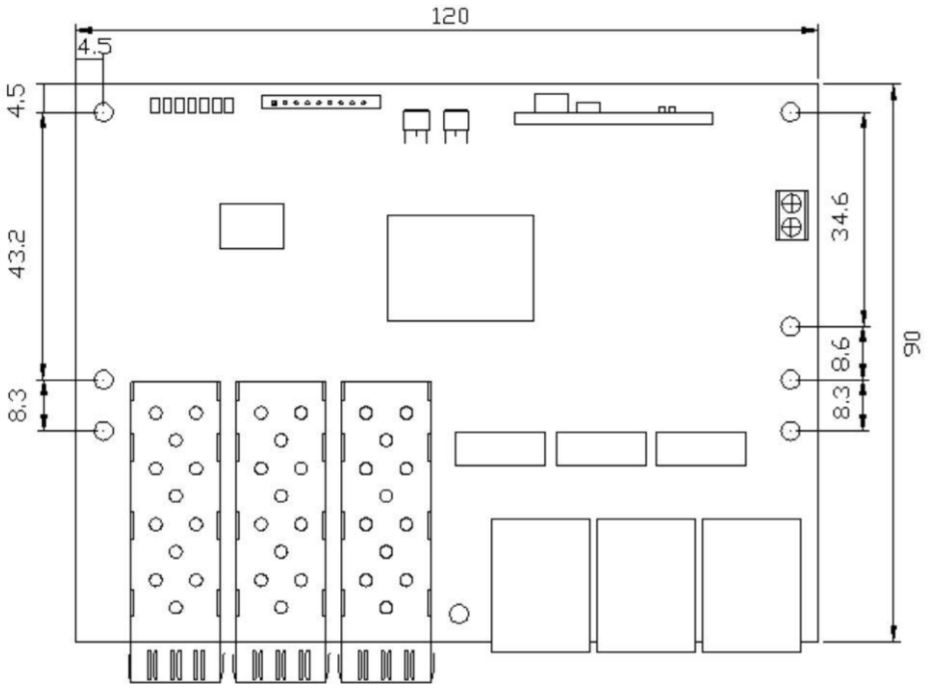


Ethernet Interface			
Model	FISE205	FISE305G	FISE306G
Ports	2x100BASE-X 1X9 3x10/100BASE-T RJ45	2x1000BASE-X 1X9 3x10/100/1000BASE-T RJ45	3x1000BASE-X SFP 3x10/100/1000BASE-T RJ45
Port Mode(Tx)	Auto-Negotiation Speed Full/Half Duplex Mode Auto MDI/MDI-X Connection		
Standards	802.3x、802.3u、802.3z、802.1D、802.1Q、802.1p、802.1ab		
Packet Buffer Size	512K	1M	1M
Maximum Packet Length	9K	10K	10K
MAC Address Table	4K	4K	4K
Transmission Mode	Store and Forward (full/half duplex mode)		
Switch Fabric	1.25G	12G	12G
Switching Latency	＜7us	＜7us	＜7us

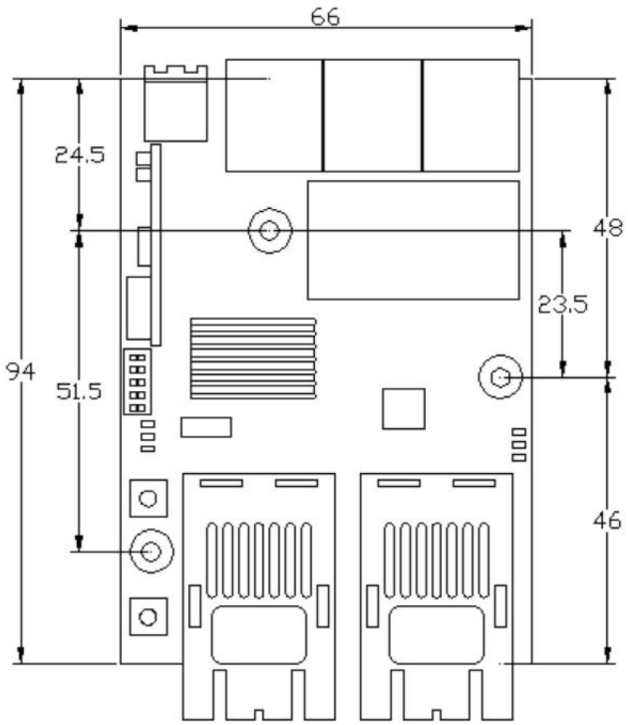
Physical Characteristics		
Model	FISE205/FISE305G	FISE306G
Dimensions	106mmx66mmx17mm	120mmx90mmx17mm
Installation	Embedded Hole Positioning	
Environmental		
Operating Temperature	-40℃~75℃ (-40 to 167 ℉)	
Operating Humidity	5%~95% (non-condensing)	
Storage Temperature	-40℃~85℃ (-40 to 185 ℉)	
MTBF	＞250,000 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 **Unit: mm**



FISE306G



FISE205/FISE305G

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-X 1x9	Input Voltage	Operating Temp.
FISE205	3	\	\	2	DC9-36V	-40 to +75℃
FISE305G	\	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 https://www.fiberroad.com or contact your local account representative.