

# ISM7100-3GF-2D-2C

## 10-ports Embedded Managed Industrial Ethernet Switch Module

### Product description

ISM7100 layer-2 managed embedded industrial Ethernet switch core module is a high-performance product developed for coal mining industry. The product uses industrial-grade switch chip to make sure the high performance for the software and hardware, meet large data traffic transmission requirements. Moreover, ISM7100 also supports MW-Ring, the recovery time is less than 20 ms.



### Features:

- 3 Gigabit ports + 7\* 10/100M ports, interface type is optional;
- Support 2 serial interface + 2 CAN bus interface;
- Support MW-Ring ring network patent technology (failure recovery time is less than 20ms);
- Support VLAN, QoS, port aggregation, IGMP and other functions;
- Support broadcast storm suppression and port rate control functions;
- Support software online upgrade, configuration file import and export function;
- Support user secondary development;
- Ultra-small size design, small size, easy to install and match;
- Support industrial grade power input, low power design;
- Industrial grade wide temperature design, fanless thermal design.

## Product specification

### Software performance

Switch Function	Support VLAN/IEEE 802.1Q VLAN Support port aggregation. Support flow control. Support Rate limit Support broadcast storm suppression.
Redundancy protocol	Support MW-Ring and the recovery time<20 ms. Support RSTP/STP
Security technology	Support IEEE 802.1x Support HTTP/HTTPS Support RADIUS Support User rating
Multicast routing	Support IGMP snooping Support static multicast
Service quality management	Support Qos setting Support SP/ WRR queuing
IP management	Support DHCP server
Management and maintenance	Support Console and Web management methods Support SNMPv1/v2c Support software upgrade Support host computer IP/MAC conflict alarm Support power failure alarm/power alarm/port alarm/support port mirroring Support log viewing Support Link-check Support NTP Support accept frame transmission frame statistics

### Technical specifications

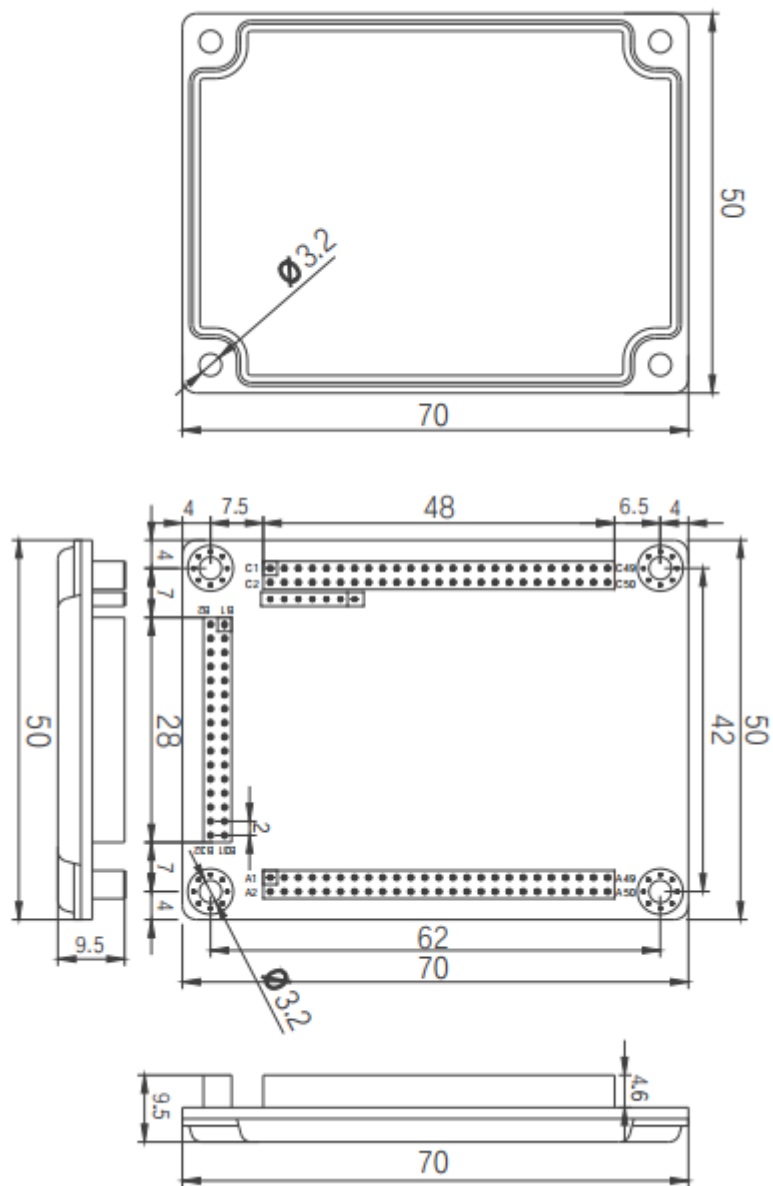
Ethernet Standard	IEEE802.3-Ethernet IEEE802.3u-100BaseTX/100Base-FX IEEE802.3x-Flow Control IEEE802.3z-1000BaseLX IEEE802.3ab-1000BaseTX IEEE802.1D-STP IEEE802.1w-RSTP IEEE802.1Q -VLAN Tagging IEEE802.1p -Class of Service IEEE802.1x-Port Based Network Access Control
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### Switch properties

Priority queue	4
VLAN Number	4096

IGMP Groups	256
MAC table	8k
Switch Bandwidth	7.6Gbps
Switch Latency	<5μs
<b>Interface</b>	
Gigabit ports	Port numbers: 3
100M ports	Port numbers:7
UART port	Up to 3, It can expand 2 RS232 or RS485 ports, 1 channel reserved for debugging
CAN Port	Port number:2 ,support CAN 2.0B protocol, 8 data bits, maximum rate support 1MB / s
USB interface	1 USB DEVICE interface, support USB2.0 protocol, It can be connected to U disk for data storage
Alarm interface	Support 2 power input information collection alarm and 1 alarm output
<b>LED indicator lights</b>	
Indicator lights	Externally connect to the indicator light, support system indicator light, network management operation indicator light
<b>Power Requirements</b>	
Power input	DC3.3V(+5%)
Power consumption	<3W
<b>Working Environment</b>	
Operating Temperature	-40°C~85°C
Storage temperature	-40°C~85°C
Ambient Humidity	5%~95%( non-condensing)
<b>Physical Characteristics</b>	
Shell	None
Installation	Embedded installation one row of 30-pin, two rows of 50-pin 2mm pitch double row female
Dimension	70mm×50mm×9.5mm
<b>Warranty</b>	
Warranty period	5 Years
Certification	CE, FCC, RoHS

## Dimensional drawing



Embedded installation (Unit: mm)

## Ordering information

ISM7100-3GF-2D-2C	3 Gigabit fiber ports + 7x 10/100M ports + 2 serial ports + 2 CAN bus ports, core module
ISM7100-3GF-2D DEMO	3 Gigabit Fx ports + 7 *10/100M Tx ports + 2 LVTTTL input + 1 LVTTTL relay output, standard demonstration board