RFID Gateway Module Profinet Industrial Communication 5 Pin M12 A Code Connector

Our Product Introduction

Basic Information

- Place of Origin: Guangdong, China
- Brand Name: KRONZ
- Certification: CE
- Model Number: KRG60-PN
- Minimum Order Quantity: 5 pieces
- Price: Negotiable
- Packaging Details: Paper box packing
- Delivery Time: 5-8 working days
- Payment Terms: T/T, Western Union, MoneyGram
- Supply Ability: 10000 pieces per month

Product Specification

- Bus Status: Profinet
- Use: Industrial Communications
- RFID Communication Interface: RS-485
- RFID Port Transmission Distance: Shielded Twisted Pair, < 50m
- Degree Of Protection: IP67 according To EN 60529
- Housing Material: Aluminum Alloy
- Housing Color: Black
- RFID Connector: M12 5Pin A Coded Female
- Highlight: **Industrial Communication RFID Gateway Module** , **Profinet Industrial Communication RFID Gateway Module** , **RFID Gateway Module**

Product Description

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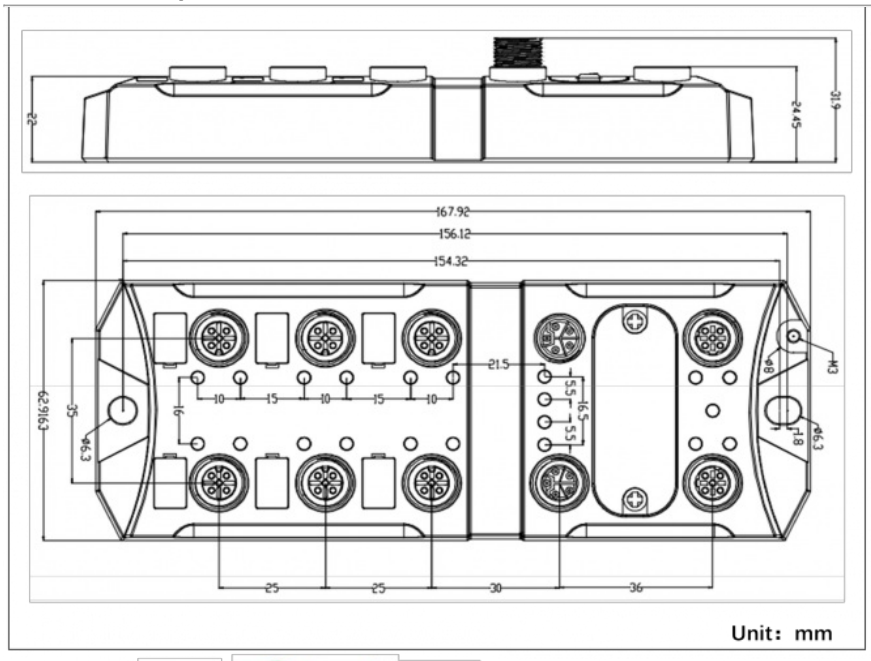
Product Description



1. Advantages:

1>. High protection level and strong corrosion resistance, can be used in harsh industrial environments

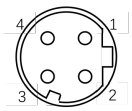
2>. Supports mainstream PLCs , provides mature PLC function blocks/routines, and supports industrial communications such as TCP/IP, Modbus TCP , PROFINET, EtherCat and Ethernet/IP

3>. High stability and reliability, 7*24h operation

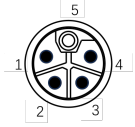
Characteristics	
Design	Dual network ports, support cascading
	Supports 6 RFID ports
Area of application	Applications in harsh industrial environments require multiple RFID and need to be connected to the bus network.

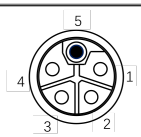
2. Electrical interface

LK1/LK2 Ethernet interface using a 4Pin-M12-DCODED-Female connector, the pin assignment is shown below.

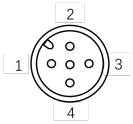
Connector	Pin	Assignment	Description
	1	TD+	Tranceive Data+
	2	RD+	Receive Data+
	3	TD-	Tranceive Data-
	4	RD-	Receive Data-

Pi/Po Power supply interface using a 5Pin-M12-LCODED-Male/Female connector, the pin assignment is shown below.

Connector(Male)	Pin	Assignment	Description
	1	US (+24V)	System power supply positive
	2	GNDL (0V)	Load power supply negative
	3	GNDS (0V)	System power supply negative
	4	UL (+24V)	Load power supply positive
	5	PE	Protective earth

Connector(Male)	Pin	Assignment	Description
	1	US (+24V)	System power supply positive
	2	GNDL (0V)	Load power supply negative
	3	GNDS (0V)	System power supply negative
	4	UL (+24V)	Load power supply positive
	5	PE	Protective earth

RF1~RF6 RFID interface using a 5Pin-M12-ACODED-Female connector, the pin assignment is shown below.

Connector	Pin	Assignment	Description
	1	US (+24V)	System power supply positive
	2	A (RS485)	RS485 A
	3	GNDS (0V)	System power supply negative
	4	B (RS485)	RS485 A
	5	NC	Not connected

4 LED Operating display

The operational statuses of the gateway module are displayed by the LEDs. The LED can adopt the colors blue or red and the statuses off, on, flashing.
The operational statuses can be divided into three categories: system status, RFID status, and bus status.

System status			
NOTICE: SYS is the system status LED, US is the voltage status LED, and CS is the key chip status LED.			
Name	Color	State	Description
SYS	Blue Red	Off	The GM is power off.
		Blue LED on	The GM has completed initialization and is operating normally.
		Blue LED flashing	The GM is running at default settings.
		Red LED on	The GM is in BOOT mode.
		Red LED flashing	Software failure.
US	Blue Red	Off	Undefined (not used).
		Blue LED on	All RFID port voltages are normal.
		Blue LED flashing	Undefined (not used).
		Red LED on	There is an abnormal voltage on a single RFID port.
		Red LED flashing	There are abnormal voltages on multiple RFID ports.
CS	Blue Red	Off	Undefined (not used).
		Blue LED on	The key chip is working normally.
		Blue LED flashing	The key chip temperature is too high.
		Red LED on	The key chip communication abnormality.
		Red LED flashing	The key chip initialization abnormality.

RFID Status			
NOTICE: RFID has 6 ports (RF1~RF6), and the RFID status is indicated by two LEDs 0/1 . 0 is equivalent to RUN , the running status indicator ; 1 is equivalent to ERR, the error status indicator.			
Name	Color	State	Description
0 (RUN)	Blue	Off	Not enabled.
		On	Communication with the reader is normal.
		Flashing	Tags exist in the recognition range.
1 (ERR)	Red	Off	No abnormality
		On	The voltage is too low.
		Flashing	Communication abnormality with the reader.

Bus status: Profinet			
NOTICE: BS0 is equivalent to SF, system failure indicator; BS1 is equivalent to BF, bus failure indicator.			
Name	Color	State	Description
BS0	Red	Off	No error
		Flashing (1Hz, 3s)	DCP signal service is initiated via the bus.
		On	Watchdog timeout; channel, generic or extended diagnosis present; system error
BS1	Red	Off	No error
		On	No configuration; or low speed physical link; or no physical link
		Flashing (2Hz)	No data exchange
LK1/2(0)	Blue	Off	The device has no link to the Ethernet.
		On	The device is linked to the Ethernet.
LK1/2(1)	Blue	Off	The device does not send/receive Ethernet frames.
		Flashing	The device is sending/receiving Ethernet frames.

Technical Data

Electrical data	
Supply voltage	18-30VDC
Current consumption	80mA@24V
Power protection	Overcurrent protection, reverse connection protection, surge protection, ESD protection, FFT protection
Power Connector	5Pin-M12-LCODED- Male (PI) 5Pin-M12-LCODED-female(PO)
Bus	PROFINET

Communication	Dual network ports with integrated switching function, compliant with IEE802.3 standard, 10 / 100M adaptive
Bus Transmission distance	Cat 5e and above shielded twisted pair, 100m
Network Connector	4Pin-M12-DCODED-M12-Female
RFID port number	6
RFID communication interface	RS-485
RFID port Transmission distance	Shielded twisted pair, < 50m
RFID connector	5Pin-M12-ACODED-Female
Permitted ambient conditions	
Operation temperature	-30 ~+70
Storage temperature	-40 ~+85
Degree of protection	IP67, according to EN 60529
Shock resistance	7M2, 500 m/s2, according to EN 60721-3-7
Vibration resistance	7M2, 200 m/s2, according to EN 60721-3-7
Mechanical specifications	
Housing Material	Aluminum Alloy
Housing color	Black
Weight	About 400g
Dimensions	167.92x62.92x31.90mm
Type of mounting	4 X M6 screws, the length of the screw should be ≥ 20 mm
Grounding	1 X M3 screws, Grounding ring inner diameter greater than 3 mm, outer diameter should be less than 8 mm.
Standards, specifications, approvals	
Proof of suitability	CE FCC RoHS WEEE

KRONZ **Kronz (guangzhou) Electronics Co., Ltd.**

+8618924160375 sales02@kronz.cn connector-industrial.com

6th Floor, B602 Building, No.10, Rong Jing 2nd Road, Yu Shan Guo Ji, Yong Ning Street, Zeng Cheng District, Guangzhou, P.R.China