RFID Gateway Module EtherCat Industrial Communication 18-30V M12 Connector

Our Product Introduction

Basic Information

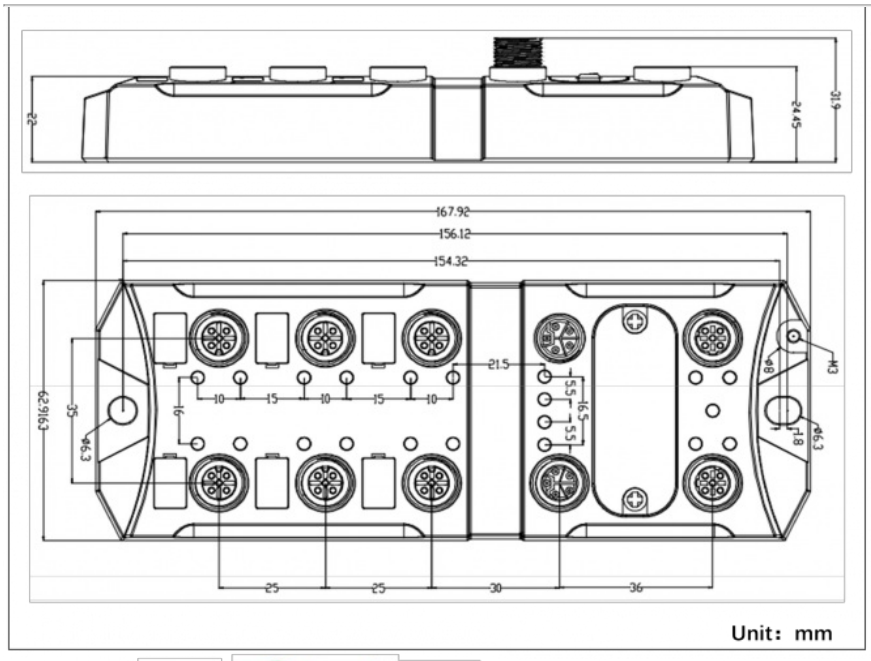
- Place of Origin: Guangdong, China
- Brand Name: KRONZ
- Certification: CE
- Model Number: KRG60-EC
- Minimum Order Quantity: 5 pieces
- Price: Negotiable
- Packaging Details: Paper box packing
- Delivery Time: 5-8 working days
- Payment Terms: T/T, Western Union, MoneyGram
- Supply Ability: 10000 pieces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

Product Specification

- Description: RFID Gateway Module
- Use: Industrial Communications
- Output: 18-30VDC
- Operating Temperature: -30 ~+70
- Interface: RS-485
- Application: Industrial Communication
- Current Consumption: <80mA@24V
- RFID Connector: M12 5Pin A Coded Female
- Highlight: **RFID Gateway Module**, **RFID Gateway Module EtherCat**, **Industrial Communication RFID Module 30V**

Product Description

RFID Gateway Module EtherCat Industrial Communication 18-30V M12 Connector



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

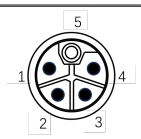
Characteristics	
Design	Dual network ports, support cascading
	Supports 6 RFID ports
Area of application	Applications in harsh industrial environments require multiple RFID and need to be connected to the bus network.

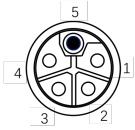
2. Electrical interface

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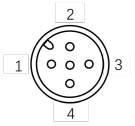
Connector	Pin	Assignment	Description
	1	US (+24V)	System power supply positive
	2	A (RS485)	RS485 A
	3	GNDS (0V)	System power supply negative
	4	B (RS485)	RS485 A
	5	NC	Not connected

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:EtherCAT			
NOTICE: BS0 is equivalent to R UN, the running status indicator; BS1 is equivalent to ERR, the error status indicator.			
Name	Color	State	Description
BS 0	Blue	Off	INIT: The device is in INIT state.
		Flashing (2.5Hz)	PRE-OPERATIONAL: The device is in PRE-OPERATIONAL state.
		Single flash	SAFE-OPERATIONAL: The device is in SAFE-OPERATIONAL state.
		On	OPERATIONAL: The device is in the OPERATIONAL state.
BS 1	Red	Off	No error: The EtherCAT communication of the device is in working condition.
		Flashing (2.5Hz)	Invalid configuration: General Configuration Error Possible reason: State change commanded by master is impossible due to register or object settings.
		Single flash	Local error: Slave device application has changed the EtherCAT state autonomously.Possible reason 1: A host watchdog timeout has occurred. Possible reason 2: Synchronization Error, device enters Safe Operational automatically.
		Double flash	Application watchdog timeout: An application watchdog timeout has occurred. Possible reason: Sync Manager Watchdog timeout.
LK 1/2 (0)	Blue	Off	The device has no link to the Ethernet.
		On	Link: The device is linked to the Ethernet, but does not send/receive Ethernet frames.
		Flashing	Activity: The device is linked to the Ethernet and sends/receives Ethernet frames.
LK 1/2 (1)	Blue	Off	Undefined(not used)

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	EtherCAT
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

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