Softlink
Powered By Googoltech

Distributed Fieldbus I/O System

G&S Intelligent Technology Co., Ltd.

1st Floor, Bldg No.4, No.555 Dongchuan Rd.,
Minhang Dist, Shanghai, 200241 China

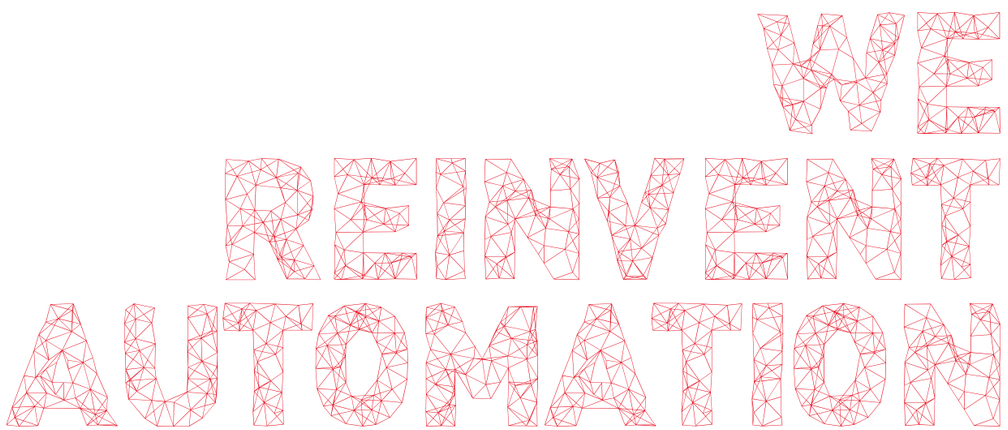
86-21-54708386/54708786

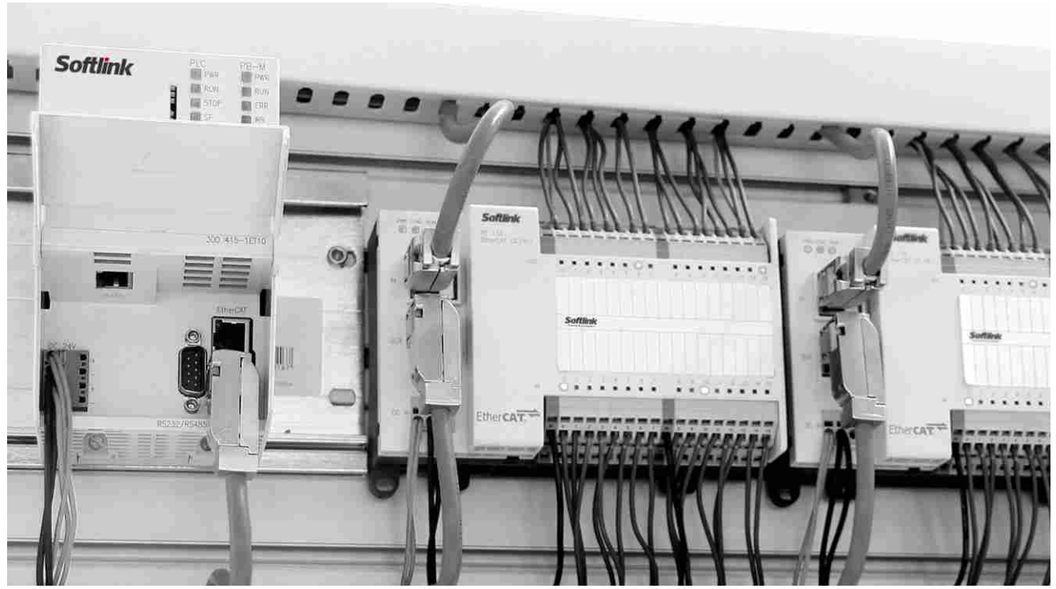
86-21-54708386

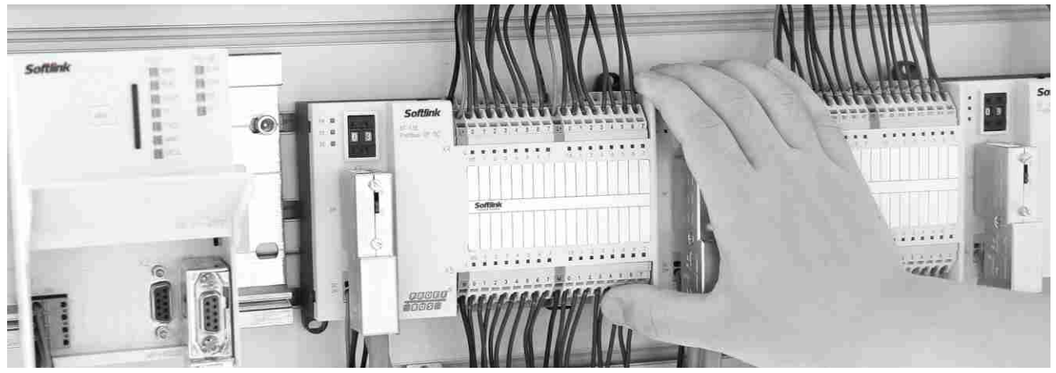
www.softlink.cn

info@softlink.cn

iModule Fieldbus I/O
iMetal Fieldbus Connector


WE
REINVENT
AUTOMATION





It is a great impact on modern automation system that more and more real-time Fieldbus technology, and centralized control equipment are replaced by distributed intelligent devices. Signal attenuation often occurs during long-distance data transmission, long distance transmission also causing signal interference. Distributed I/O system is a good solution for long distance communication.

Thanks to modularized design and multiple communication protocols, Softlink iModule series remote I/O has great advantages, which is easy to use, smart and anti-interference.

- Central processor unit embedded in the central control room
- I/O is distributed in every equipment or device to be controlled
- iModule series I/O communicating with master station by Fieldbus protocol

WE
REINVENT
AUTOMATION

iModule

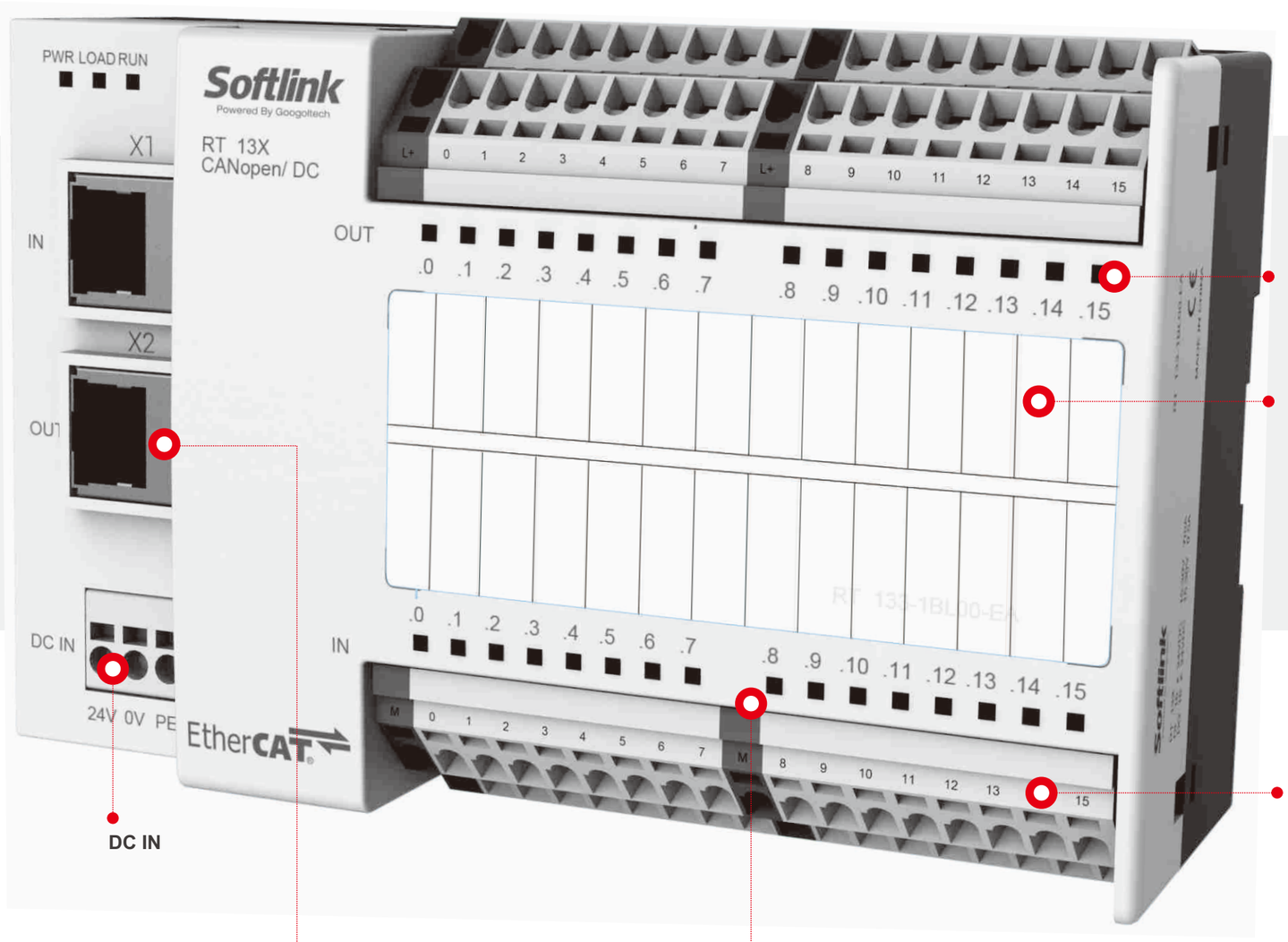
01

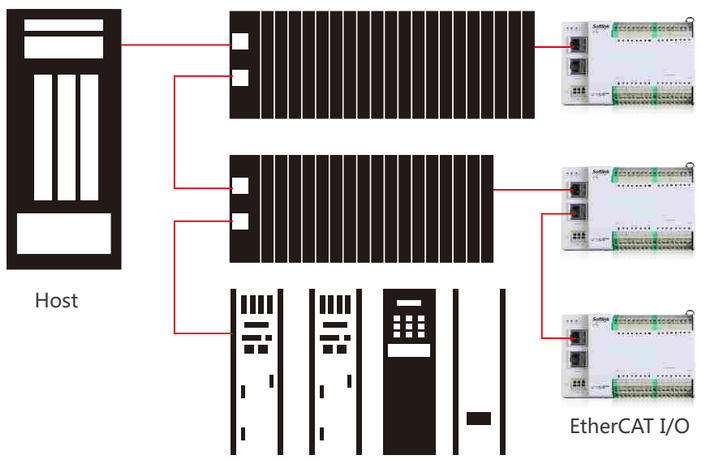
Distributed Fieldbus I/O

- Compact design, vibration resistance
- Spring terminals,get reliable connection
- Two layers terminals, saving wiring space
- Support PNP and NPN inputs
- Unique design of the internal power supply
- Decimal button, flexible switching from 0-99 stations
- Up to 32 channels for data communication

iModule series Fieldbus I/O integrated communication ports, power module, I/O module all in one, compact design and space-saving. It is widely used in various applications for stable and high cost performance.

Compact design in one unit
Unified shell dimension : 155*105*55mm (W/H/D)
Installation : standard DIN rail mounting,
specification is TS35/7.5
IP20



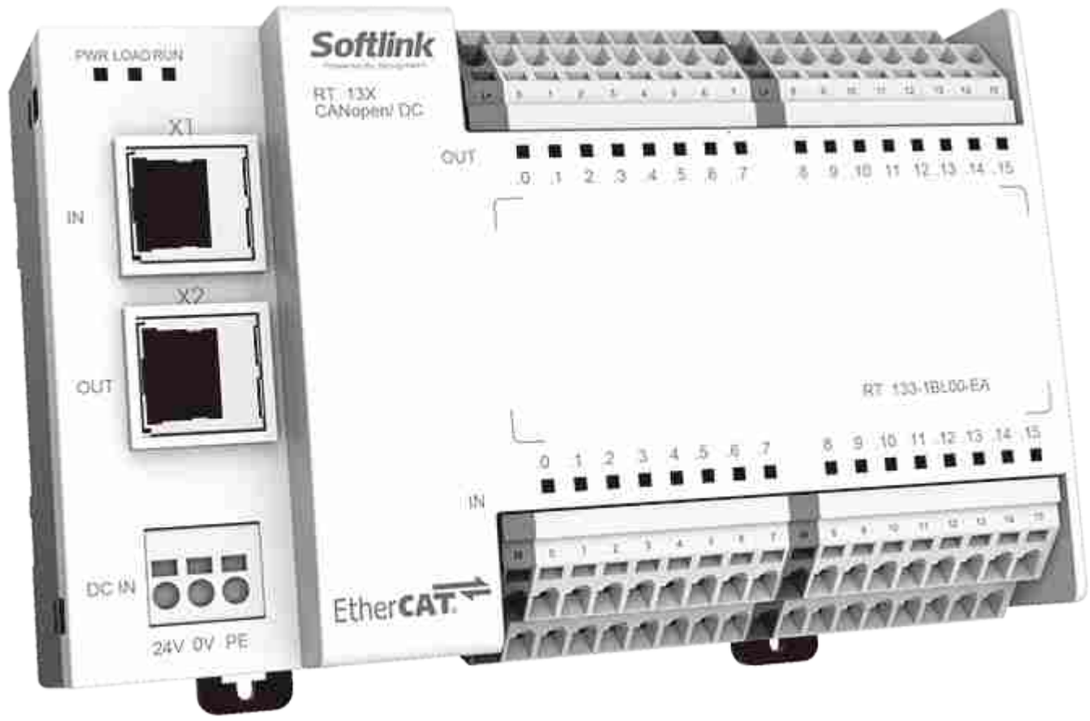


EtherCAT

The real-time EtherCAT technology, widely used in machines and motion control applications. Outstanding performance, flexible topology and simple configuration characterise EtherCAT , the real-time Ethernet technology, which is the expansion of IEEE 802.3 as part of IEC 61158. EtherCAT sets new standards where conventional fieldbus systems reach their limits: 1,000 distributed I/Os in 30 µs, almost unlimited network size, and optimum vertical integration thanks to Ethernet and internet technologies. With EtherCAT, the costly Ethernet star topology can be replaced with a simple line or tree structure – no expensive infrastructure com ponents are required. All types of Ethernet devices can be integrated via a switch or switch port. Where other real-time Ethernet approaches require special master or scanner cards, EtherCAT manages with very cost-effective standard Ethernet interface cards.

Order No.	Product Description	Order No.	Product Description
RT131-1BL00-EA	Digital 32 Input	RT133-1BL00-EA	Digital 16 Input /16 Output (Mosfet)
RT132-1BL00-EA	Digital 32 Output (Mosfet)	RT133-1PL00-EA	Digital 16 Input /16 Output (Relay)

Order No.	RT131-1BL00-EA	RT132-1BL00-EA	RT133-1BL00-EA	RT133-1PL00-EA
Type	Digital Input Module	Digital Output Module	Digital I/O Module	Digital I/O Module
Digital Input				
Number of inputs	32	0	16	16
Input filter	0.5ms	-	0.5ms	0.5ms
Nominal Input Voltage	24 V DC(-15%/+20%)	-	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)
“1" signal voltage	15~30VDC,7mA	-	15~30VDC,7mA	15~30VDC,7mA
"0" signal voltage	0~5VDC	-	0~5VDC	0~5VDC
Port protect	Impact over Voltage protection	-	Impact over Voltage protection	Impact over Voltage protection
Digital Output				
Number of outputs	0	32	16	16
Output type	-	Mosfet	Mosfet	Relay
Nominal output voltage	-	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)	30 V DC/250V AC
“1" signal voltage	-	Open drain output	Open drain output	Dry contact short circuit
"0" signal voltage	-	Max:1.5VDC,10kΩ Load	Max:1.5VDC,10kΩ Load	Dry contact open circuit
Max. output current(per Ch.)	-	0.5A	0.5A	1A
Short circuit current(per Ch.)	-	1A	1A	2A
Max. output current(Total.)	-	8A*2	8A	16A
On-Resistance	-	0.3Ω(Type)/0.6Ω(Max)	0.3Ω(Type)/0.6Ω(Max)	≤50mΩ
Port protect	-	Overvoltage & overcurrent		-
Total error	-	-	-	-
Output settling time	-		-	-
Voltage supply	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)
Electrical isolation (Bus/Field potential)	AC 500V	AC 500V	AC 500V	AC 500V
Protocol	EtherCAT	EtherCAT	EtherCAT	EtherCAT
Connector	2 x RJ45	2 x RJ45	2 x RJ45	2 x RJ45
Transmission rate	100 Mbps	100 Mbps	100 Mbps	100 Mbps
Address config	Automatic scanning	Automatic scanning	Automatic scanning	Automatic scanning
Distributed clocks	No	No	No	No
Installation	DIN Rail (TS35)	DIN Rail (TS35)	DIN Rail (TS35)	DIN Rail (TS35)
LED Indicate				
PWR	Green	Green	Green	Green
LOAD	Green	Green	Green	Green



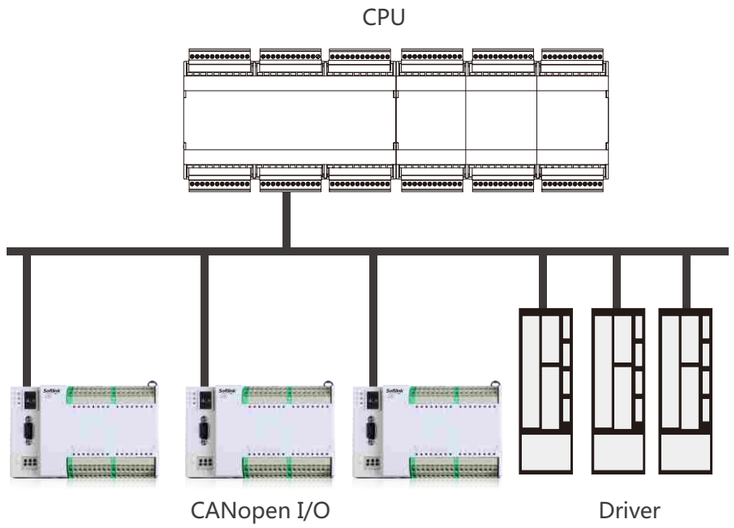
Order No.	RT131-1BL00-EA	RT132-1BL00-EA	RT133-1BL00-EA	RT133-1PL00-EA
RUN	Green	Green	Green	Green
ERR	-	-	-	-
Digital I/O	Green	Green	Green	Green
Dimensions(W/H/D,mm)	155×105×55	155×105×55	155×105×55	155×105×55

Order No.	Product Description
RT133-3FC00-EA	Digital 8 Input/8 Output (Mosfet) , Analog 8 Input/4 Output
RT133-3FC10-EA	Digital 8 Input/8 Output (Mosfet) , Analog 8 Input/4 Output

Order No.	RT133-3FC00-EA	RT133-3FC10-EA
Type	Mixed Signal I/O Module	Mixed Signal I/O Module
Digital Input		
Number of inputs	8	8
Input filter	0.5ms	0.5ms
Nominal input voltage	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)
“1" signal voltage	15~30VDC,7mA	15~30VDC,7mA
“0" signal voltage	0~5VDC	0~5VDC
Port protect	Impact over voltage protection	Impact over voltage protection
Digital Output		
Number of inputs	8	8
Output Type	Mosfet	Mosfet
Nominal input voltage	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)
“1" signal voltage	Open drain output	Open drain output
“0" signal voltage	Max:1.5VDC,10kΩ Load	Max:1.5VDC,10kΩ Load
Max. output current(per Ch.)	0.5A	0.5A
Short circuit current(per Ch.)	1A	1A
Max. output current(Total.)	4A	4A
On-Resistance	0.3Ω(Type)/0.6Ω(Max.)	0.3Ω(Type)/0.6Ω(Max.)
Port protect	overvoltage & overcurrent protection	overvoltage & overcurrent protection
Analog Input		
Number of inputs	8	8
Signal Type	Single-ended Voltage	Single-ended Current
Input impedance	＞200kΩ	249Ω
Range	0~5V,0~10V,±1.25V,±2.5V,±5V,±10V	4~20mA,0~20mA,+/-20mA
Resolutions	16bit	16bit
Total error	<±0.1%	<±0.1%
Conversion rate	100kSPS/ch	100kSPS/ch
Analog Output		
Number of inputs	4（Voltage or Current ）	4（Voltage or Current ）
Range	Voltage：0~5V，0~10V，+/−5V，+/−10V Current：4~20mA，0~20mA	Voltage：0~5V，0~10V，+/−5V，+/−10V Current：4~20mA，0~20mA
On load capacity	Voltage： ≥1kΩ ; Current： ≤500Ω	Voltage： ≥1kΩ ; Current： ≤500Ω

Order No.	RT133-3FC00-EA	RT133-3FC10-EA
Resolutions	16bit	16bit
Output error	<0.1 %	<0.1%
Output settling time	~ 100μs	~ 100 μs
Voltage supply	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)
Electrical isolation(Bus/Field potential)	AC 500V	AC 500V
Protocol	EtherCAT	EtherCAT
Connector	2 x RJ45	2 x RJ45
Transmission rate	100 Mbps	100 Mbps
Address config	Automatic scanning	Automatic scanning
Distributed clocks	T.B.D.	T.B.D.
Installation	DIN Rail(TS35)	DIN Rail(TS35)
LED Indicate		
PWR	Green	Green
LOAD	Green	Green
RUN	-	-
ERR	Red	Red
Digital I/O	Green	Green
Dimensions(W/H/D,mm)	155×105×55	155×105×55

CANopen®



CANopen®

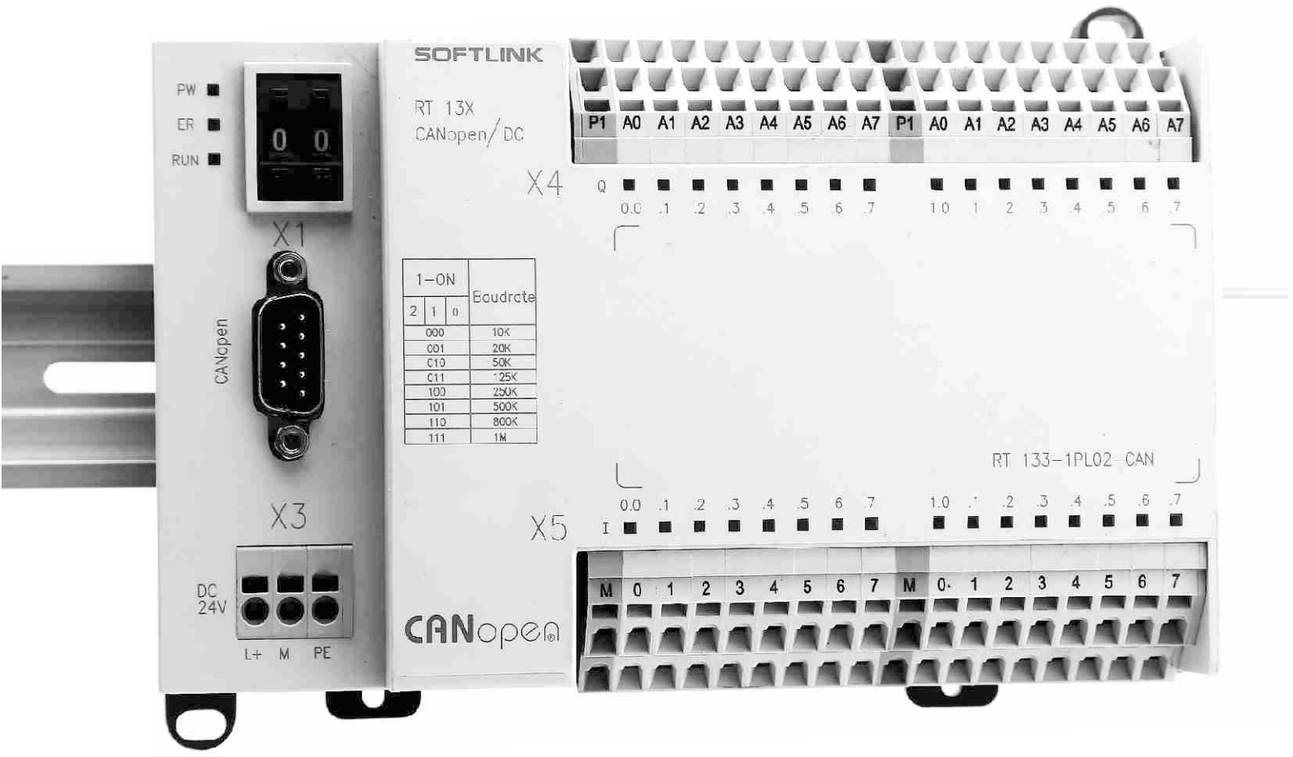
CANopen is an upper-layer communication protocol based on Controller Area Network, being one of the popular modern industry Fieldbus, drafted and developed by non-profit organization CiA (CAN in Automaion). The CiA drafts standard 301 definition basic CANopen equipment and sub-agreement. The sub-agreements of individual devices are further expansion based on CiA 301, such as CiA401 for I / O modules and CiA402 for motion control. CANopen adopts two-wire serial communication, and allows up to 127 devices in a CANopen network. The maximum transfer rate is 1Mbps / 40 meters, and the maximum transmission distance is 10,000 m / 5kbps.

iModule series CANopen remote I/O is, via acquiring signals and communicating with the master station, to complete a reliable control of fieldbus devices.

Order No.	Product Description	Order No.	Product Description
RT131-1BL00-CAN	Digital 32 Input	RT133-1BL00-CAN	Digital 16 Input/16 Output （Mosfet）
RT132-1BL00-CAN	Digital 32 Output （Mosfet）	RT133-1PL02-CAN	Digital 16 Input/16 Output （Relay）

Order No.	RT131-1BL00-CAN	RT132-1BL00-CAN
Type	Digital Input Module	Digital Output Module
Digital Input		
Number of inputs	32	0
Input filter	0.5ms	-
Nominal input voltage	24 V DC(-15%/+20%)	-
“1 “ signal voltage	15~30VDC,7mA	-
“0 “ signal voltage	0~5VDC	-
Port protect	Impact over voltage protection	-
Digital Output		
Number of inputs	0	32
Output Type	-	Mosfet
Nominal input voltage	-	24 V DC(-15%/+20%)
“1" signal voltage	-	Open drain output
“0" signal voltage	-	Max:1.5VDC,10kΩ Load
Max. output current(per Ch.)	-	0.5A
Short circuit current(per Ch.)	-	1A
Max. output current(Total.)	-	8A*2
On-Resistance	-	0.3Ω(Type)/0.6Ω(Max.)
Port protect	-	overvoltage & overcurrent protection
Voltage supply	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)
Electrical isolation (Bus/Field potential)	AC 500V	AC 500V
Protocol	CANopen	CANopen
Connector	D-Sub9	D-Sub9
Transmission rate	10k~1Mbps((config by 3-bit dial switch)	10k~1Mbps(config by 3-bit dial switch)
Address config	00~99(config by 2-bit dial switch)	00~99(config by 2-bit dial switch)
Communication Profile	CiA DS-301	CiA DS-301
Device Profile	CiA DS-401	CiA DS-401
Device monitor	Heartbeat, Node Guarding	Heartbeat, Node Guarding
Installation	DIN Rail(TS35)	DIN Rail(TS35)
LED Indicate		
PWR	Green	Green
ERR	Red	Red

Order No.	RT133-1BL00-CAN	RT133-1PL02-CAN
Type	Digital I/O Module	Digital I/OModule
Digital Input		
Number of inputs	16	16
Input filter	0.5ms	0.5ms
Nominal input voltage	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)
“1 “ signal voltage	15~30VDC,7mA	15~30VDC,7mA
“0 “ signal voltage	0~5VDC	0~5VDC
Port protect	Impact over voltage protection	Impact over voltage protection
Digital Output		
Number of inputs	16	16
Output Type	Mosfet	Relay
Nominal input voltage	24 V DC(-15%/+20%)	30 V DC/250V AC
“1 “ signal voltage	Open drain output	Dry contact short circuit
“0 “ signal voltage	Max:1.5VDC,10kΩ Load	Dry contact open circuit
Max. output current(per Ch.)	0.5A	1A
Short circuit current(per Ch.)	1A	2A
Max. output current(Total.)	8A	16A
On-Resistance	0.3Ω(Type)/0.6Ω(Max.)	≤50mΩ
Port protect	overvoltage & overcurrent protection	-
Voltage supply	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)
Electrical isolation (Bus/Field potential)	AC 500V	AC 500V
Protocol	CANopen	CANopen
Connector	D-Sub9	D-Sub9
Transmission rate	10k~1Mbps(config by 3-bit dial switch)	10k~1Mbps(config by 3-bit dial switch)
Address config	00~99(config by 2-bit dial switch)	00~99(config by 2-bit dial switch)
Communication Profile	CiA DS-301	CiA DS-301
Device Profile	CiA DS-401	CiA DS-401
Device monitor	Heartbeat, Node Guarding	Heartbeat, Node Guarding
Installation	DIN Rail(TS35)	DIN Rail(TS35))
LED Indicate		
PWR	Green	Green
ERR	Red	Red



Order No.	RT131-1BL00-CAN	RT132-1BL00-CAN	RT133-1BL00-CAN	RT133-1PL02-CAN
RUN	Orange	Orange	Orange	Orange
Digital I/O	Green	Green	Green	Green
Dimensions(W/H/D,mm)	155×105×55	155×105×55	155×105×55	155×105×55

Order No.	Product Description
RT133-3HF10-CAN	Digital 8 Input/8Output（Mosfet），Analog12Input/2 Output
RT133-3RJ00-CAN	Digital 8 Input/8 Output（Mosfet），4thermal resistance

Order No.	RT133-3HF10-CAN	RT133-3RJ00-CAN
Type	Mixed Signal I/O Module	Temperature module
Digital Input		
Number of inputs	8	8
Input filter	0.5ms	0.5ms
Nominal input voltage	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)
“1 ” signal voltage	15~30VDC,7mA	15~30VDC,7mA
“0 ” signal voltage	0~5VDC	0~5VDC
Port protect	Impact over voltage protection	Impact over voltage protection
Digital Output		
Number of inputs	8	8
Output Type	Mosfet	Mosfet
Nominal input voltage	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)
“1 ” signal voltage	Open drain output	Open drain output
“0 ” signal voltage	Max:1.5VDC,10kΩ Load	Max:1.5VDC,10kΩ Load
Max. output current(per Ch.)	0.5A	0.5A
Short circuit current(per Ch.)	1A	1A
Max. output current(Total.)	8A	8A
On-Resistance	0.3Ω(Type)/0.6Ω(Max.)	0.3Ω(Type)/0.6Ω (Max.)
Port protect	overvoltage & overcurrent protection	overvoltage & overcurrent protection
Analog Input		
Number of inputs	12	4
Signal Type	6*(differential voltage)+6*(current)	RTD, PT100, PT200, PT500, PT1000, Ni100, Ni120, Ni1000"
Input impedance	＞100kΩ	-
Range	±10V, ±20mA	100Ω...200kΩ
Resolutions	14bit	24bit,0.001℃
Total error	＜±0.05%Full scale	＜±0.05%Full scale
Conversion rate	＞1kSPS/ch	250mS/4ch
Software filter	No	0x,1x,2x,3x,4xYes
Others	-	50/60Hz filter, break wire instructions
Analog Output		
Number of inputs	2 X Voltage or 2 X Current	-
Output Range	±10V,±20mA	-

Order No.	RT133-3HF10-CAN	RT133-3RJ00-CAN
Resolutions	12bit	-
Output error	<±0.05%Full scale	-
Output settling time	> 5kSPS/ch	-
Voltage supply	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)
Electrical isolation (Bus/Field potential)	AC 500V	AC 500V
Protocol	CANopen	CANopen
Connector	D-Sub9	D-Sub9
Transmission rate	10k~1Mbps(config by 3-bit dial switch)	10k~1Mbps(config by 3-bit dial switch)
Address config	00~99(config by 2-bit dial switch)	00~99(config by 2-bit dial switch)
Communication Profile	CiA DS-301	CiA DS-301
Device Profile	CiA DS-401	CiA DS-401
Device monitor	Heartbeat, Node Guarding	Heartbeat, Node Guarding
Installation	DIN Rail(TS35)	DIN Rail(TS35)
LED Indicate		
PWR	Green	Green
ERR	Red	Red
RUN	Orange	Orange
Digital I/O	Green	Green
Dimensions(W/H/D,mm)	155×105×55	155×105×55

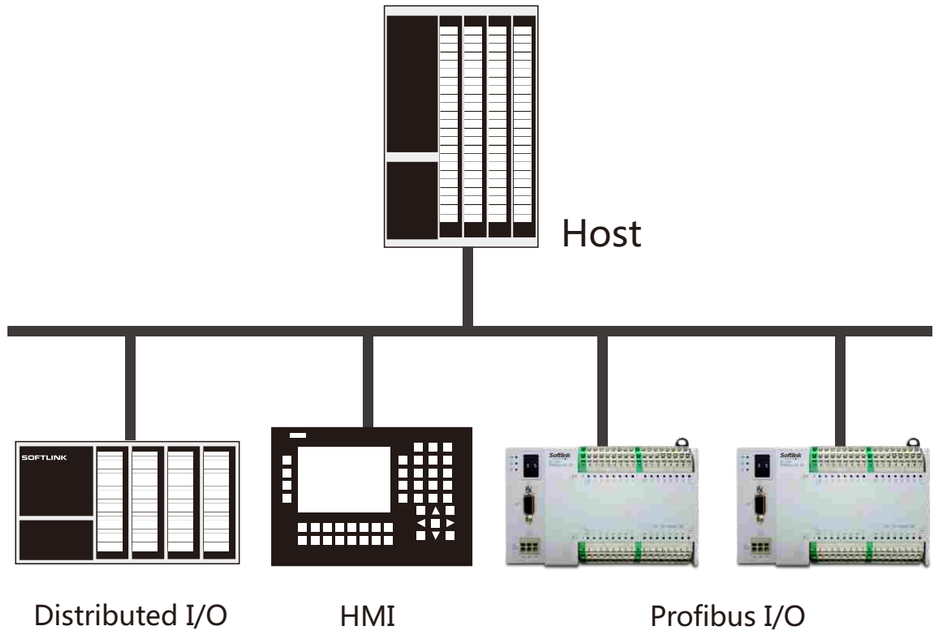
Order No. Product Description

RT133-4TJ00-CAN	Digital 8 Input/8 Output （Mosfet），4 thermocouple
RT131-4RH00-CAN	16 thermal resistance
RT131-4TH00-CAN	16 thermocouple

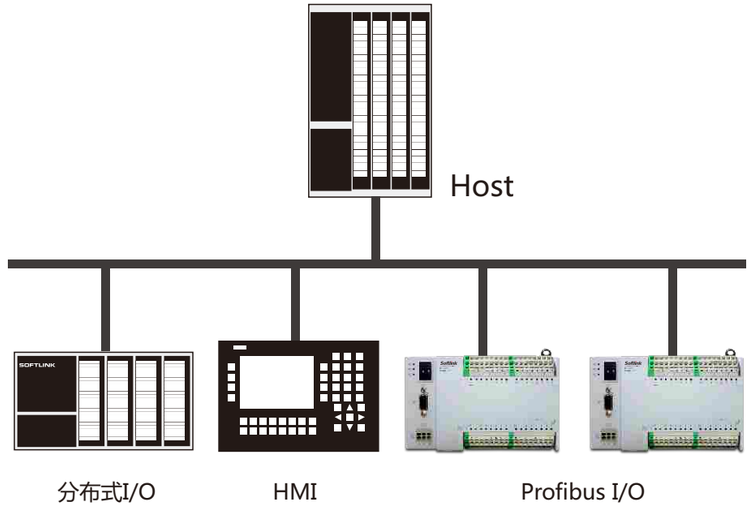
Order No.	RT133-4TJ00-CAN	RT131-4RH00-CAN	00-CANRT131-4TH
Type	Temperature module	Temperature module	Temperature module
Digital Input			
Number of inputs	8	-	-
Input filter	0.5ms	-	-
Nominal input voltage	24 V DC(-15%/+20%)	-	-
“1 “ signal voltage	15~30VDC,7mA	-	-
“0 “ signal voltage	0~5VDC	-	-
Port protect	-	Impact over voltage protection	-
Digital Output			
Number of inputs	8	-	-
Output Type	Mosfet	-	-
Nominal input voltage	24 V DC(-15%/+20%)	-	-
“1 “ signal voltage	Open drain output	-	-
“0 “ signal voltage	Max: 1.5VDC,10kΩ Load	-	-
Max. output current(per Ch.)	0.5A	-	-
Short circuit current(per Ch.)	1A	-	-
Max. output current(Total.)	8A	-	-
On-Resistance	0.3Ω(Type)/0.6Ω(Max.)	-	-
Port protect	Overvoltage & overcurrent protection		-
Analog Input			
Number of inputs	4	16	16
Signal Type	All Type thermocouple	thermal resistance, PT100, PT200, PT500, PT1000, Ni100, Ni120, Ni1000	All Type Typethermocouple
Input impedance	> 100kΩ	-	> 100kΩ
Range	±100mV	100Ω...200kΩ	±100mV
Resolutions	24bit,0.001℃	24bit, 0.001℃	24bit,0.001℃
Total error	<±0.05%Full scale	<±0.05%Full scale	<±0.05%Full scale
Conversion rate	250mS/4ch	1000mS/8ch	1000mS/8ch
Software filter	0x,1x,2x,3x,4xYes	0x,1x,2x,3x,4xYes	0x,1x,2x,3x,4xYes
Others	50/60Hz filter,cold junction compensation	50/60Hz filter	50/60Hz filter,cold junction compensation
Voltage supply	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)
Electrical isolation (Bus/Field potential)	AC 500V	AC 500V	AC 500V
Protocol	CANopen	CANopen	CANopen

Order No.	RT133-4TJ00-CAN	RT131-4RH00-CAN
Connector	D-Sub9	D-Sub9
Transmission rate	10k~1Mbps(config by 3-bit dial switch)	10k~1Mbps(config by 3-bit dial switch)
Address config	00~99(config by 2-bit dial switch)	00~99(config by 2-bit dial switch)
Communication Profile	CiA DS-301	CiA DS-301
Device Profile	CiA DS-401	CiA DS-401
Device monitor	Heartbeat, Node Guarding	Heartbeat, Node Guarding
Installation	DIN Rail(TS35)	DIN Rail(TS35)
LED Indicate		
PWR	Green	Green
ERR	Red	Red
Run	Orange	Orange
Digital I/O	Green	Green
Dimensions(W/H/D,mm)	155×105×55	155×105×55

Order No.	RT131-4TH00-CAN
Connector	D-Sub9
Transmission rate	10k~1Mbps(config by 3-bit dial switch)
Address config	00~99(config by 2-bit dial switch)
Communication Profile	CiA DS-301
Device Profile	CiA DS-401
Device monitor	Heartbeat, Node Guarding
Installation	DIN Rail(TS35)
LED Indicate	
PWR	Green
ERR	Red
Run	Orange
Digital I/O	Green
Dimensions(W/H/D,mm)	155×105×55



PROFI BUS®



PROFI BUS®

Profibus is also a popular modern industry Fieldbus developed on RS485, according to the ISO / OSI reference model standard, becoming a German standard when published in DIN19245 in April 1991. With the maximum transfer rate of 12Mbps / 100 meters and the maximum transmission distance of 1200 meters /9.6kbps, the Profibus network's size up to 126 nodes, the network length 100-1200m.

iModule series of Profibus I/O enables fast connection to Profibus bus network, via acquiring signals and communicating with the master station, to complete a reliable control of fieldbus devices.

Order No.	Product Description
RT131-1BL02-DP	Digital 32 Input
RT132-1BL02-DP	Digital 32 Output （Mosfet）

Order No.	Product Description
RT133-1BH02-DP	Digital 8 Input/8 Output （Mosfet）
RT133-1BL02-DP	Digital 16 Input/16 Output（Mosfet）

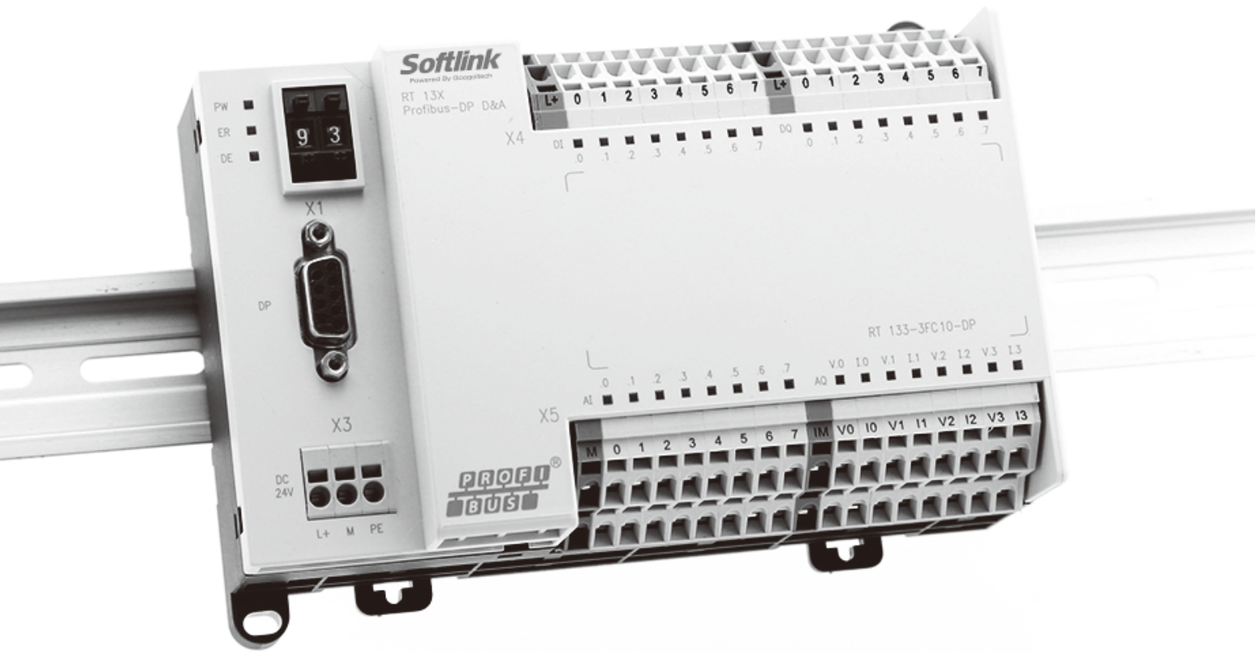
Order No.	RT131-1BL02-DP	RT132-1BL02-DP
Type	Digital Input Module	Digital Output Module
Digital Input		
Number of inputs	32	0
Input filter	0.5ms	-
Nominal input voltage	24 V DC(-15%/+20%)	-
“1 “ signal voltage	15~30VDC,7mA	-
“0 “ signal voltage	0~5VDC	-
Port protect	Impact over voltage protection	
Digital Output		
Number of inputs	0	32
Output Type	-	Mosfet
Nominal input voltage	-	24 V DC(-15%/+20%)
“1 “ signal voltage	-	Open drain output
“0 “ signal voltage	-	Max:1.5VDC,10kΩ Load
Port protect	-	Overvoltage & overcurrent protection
Max. output current(per Ch.)	-	0.5A
Short circuit current(per Ch.)	-	1A
Max. output current(Total.)	-	8A
On-Resistance	-	0.3Ω(Type)/0.6Ω(Max.)
Voltage supply	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)
Electrical isolation(Bus/Field potential)	AC 500V	AC 500V
Protocol	Profibus DP V0	Profibus DP V0
Connector	DB9Female	DB9Female
Transmission rate	9.6kbps~12Mbps, adaptive	-
Address config	00~99(config by 2-bit dial switch)	
Installation	DIN Rail(TS35)	DIN Rail(TS35)
LED Indicate		
PWR	Green	Green
ERR	Red	Red
RUN	Orange	Orange
Digital I/O	Green	Green
Dimensions(W/H/D,mm)	105×55×155	105×55×155

Order No.	RT133-1BH02-DP	RT133-1BL02-DP
Type	Digital I/O Module	Digital I/O Module
Digital Input		
Number of inputs	8	16
Input filter	0.5ms	0.5ms
Nominal input voltage	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)
“1" signal voltage	15~30VDC,7mA	15~30VDC,7mA
“0" signal voltage	0~5VDC	0~5VDC
Port protect		
Digital Output		
Number of inputs	8	16
Output Type	Mosfet	Mosfet
Nominal input voltage	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)
“1" signal voltage	Open drain output	Open drain output
“0" signal voltage	Max:1.5VDC,10kΩ Load	Max:1.5VDC,10kΩ Load
Port protect		
Max. output current(per Ch.)	0.5A	0.5A
Short circuit current(per Ch.)	1A	1A
Max. output current(Total.)	8A	8A
On-Resistance	0.3Ω(Type)/0.6Ω(Max.)	0.3Ω(Type)/0.6Ω(Max.)
Voltage supply	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)
Electrical isolation(Bus/Field potential)	AC 500V	AC 500V
Protocol	Profibus DP V0	Profibus DP V0
Connector	DB9Female	DB9Female
Transmission rate	9.6kbps~12Mbps, adaptive	
Address config	00~99(config by 2-bit dial switch)	
Installation	DIN Rail(TS35)	DIN Rail(TS35)
LED Indicate		
PWR	Green	Green
ERR	Red	Red
RUN	Orange	Orange
Digital I/O	Green	Green
Dimensions(W/H/D,mm)	105×55×155	105×55×155

Order No.	Product Description
RT133-1PL02-DP	Digital 16 Input/ 16 Output （Relay）
RT133-3FC00-DP	Digital 8 Input/ 8 Output （Mosfet），Analog 8 Input/ 4 Output
RT133-3FC10-DP	Digital 8 Input/ 8 Output （Mosfet），Analog 8 Input/ 4 Output
RT133-3KB00-DP	Digital 16 Input/ 8 Output （Mosfet），Analog 4 Input

Order No.	RT133-1PL02-DP	RT133-3FC00-DP
Type	Digital I/O Module	Mixed Signal I/O Module
Digital Input		
Number of inputs	16	8
Input filter	0.5ms	0.5ms
Nominal input voltage	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)
“1" signal voltage	15~30VDC,7mA	-
“0" signal voltage	0~5VDC	-
Port protect	Impact over voltage protection	Impact over voltage protection
Digital Output		
Number of inputs	16	8
Output Type	Relay	Mosfet
Nominal input voltage	30 V DC/250V AC	24 V DC(-15%/+20%)
“1" signal voltage	Dry contact short circuit	Open drain output
“0" signal voltage	Dry contact open circuit	Max:1.5VDC,10kΩ Load
Max. output current(per Ch.)	-	Overvoltage & overcurrent protection
Short circuit current(per Ch.)	1A	0.5A
Max. output current(Total.)	2A	1A
On-Resistance	16A	8A
Port protect	≤50mΩ	0.3Ω(Type)/0.6Ω(Max.)
Analog Input		
Number of inputs	-	8
Signal Type	-	Single-ended voltage
Input impedance	-	＞200kΩ
Range	-	0~5V,0~10V,±1.25V,±2.5V,±5V,±10V
Resolutions	-	16bit
Total error	-	＜±0.1%
Conversion rate	-	100kSPS/ch
Software filter	-	No
Analog Output		
Number of inputs	-	4
Output Range	-	0~10V or 0~20mA
Load	-	＞5kΩ

Order No.	RT133-3FC10-DP	RT133-3KB00-DP
Type	Mixed Signal I/OModule	Mixed Signal I/O Module
Digital Input		
Number of inputs	8	16
Input filter	0.5ms	0.5ms
Nominal input voltage	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)
“1" signal voltage	-	-
“0" signal voltage	-	-
Port protect	Impact over voltage protection	Impact over voltage protection
Digital Output		
Number of inputs	8	8
Output Type	Mosfet	Mosfet
Nominal input voltage	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)
“1" signal voltage	Open drain output	Open drain output
“0" signal voltage	Max:1.5VDC,10kΩ Load	Max:1.5VDC,10kΩ Load
Max. output current(per Ch.)	0.5A	0.5A
Short circuit current(per Ch.)	1A	1A
Max. output current(Total.)	8A	8A
On-Resistance	0.3Ω(Type)/0.6Ω(Max.)	0.3Ω(Type)/0.6Ω(Max.)
Port protect	Overvoltage & overcurrent protection	Overvoltage & overcurrent protection
Analog Input		
Number of inputs	8	4
Signal Type	Current	Single-ended voltage
Input impedance	＞200kΩ	＞200kΩ
Range	0~20mA,±20mA	0~5V,0~10V,±5V,±10V,
Resolutions	16bit	12bit
Total error	＜±0.1%	＜±0.5%
Conversion rate	100kSPS/ch	100kSPS/ch
Software filter	No	No
Analog Output		
Number of inputs	4	-
Output Range	0~10V or 0~20mA	-
Load	＞5kΩ	-



Order No.	RT133-1PL02-DP	RT133-3FC00-DP
Resolutions	-	16bit
Output error	-	<0.1%
Output settling time	-	~100 μs
Voltage supply	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)
Electrical isolation(Bus/Field potential)	AC 500V	AC 500V
Protocol	Profibus DP V0	Profibus DP V0
Connector	DB9Female	DB9Female
Transmission rate	9.6kbps~12Mbps, adaptive	9.6kbps~12Mbps, adaptive
Address config	00~99(config by 2-bit dial switch)	00~99(config by 2-bit dial switch)
Installation	DIN Rail(TS35)	DIN Rail(TS35)
LED Indicate		
PWR	Green	Green
ERR	Red	Red
RUN	Orange	Orange
Digital I/O	Green	Green
Dimensions(W/H/D,mm)	105×55×155	155×105×55

Order No.	RT133-3FC10-DP	RT133-3KB00-DP
Resolutions	16bit	-
Output error	<0.1%	-
Output settling time	~100μs	-
Voltage supply	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)
Electrical isolation(Bus/Field potential)	AC 500V	AC 500V
Protocol	Profibus DP V0	Profibus DP V0
Connector	DB9Female	DB9Female
Transmission rate	9.6kbps~12Mbps, adaptive	9.6kbps~12Mbps, adaptive
Address config	00~99(config by 2-bit dial switch)	00~99(config by 2-bit dial switch)
Installation	DIN Rail(TS35)	DIN Rail(TS35)
LED Indicate		
PWR	Green	Green
ERR	Red	Red
RUN	Orange	Orange
Digital I/O	Green	Green
Dimensions(W/H/D,mm)	155×105×55	155×105×55

Order No.	Product Description
RT133-3HC10-DP	Digital 8 Input/ 8 Output （Mosfet），Analog 8 Input/ 4 Output
RT133-3RJ00-DP	Digital 8 Input/ 8 Output （Mosfet），4 Thermal Resistance

Order No.	RT133-3HC10-DP	RT133-3RJ00-DP
Type	Mixed Signal I/O Module	Temperature module
Digital Input		
Number of inputs	8	8
Input filter	0.5ms	0.5ms
Nominal input voltage	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)
“1" signal voltage	-	-
“0" signal voltage	-	-
Port protect	Impact over voltage protection	Impact over voltage protection
Digital Output		
Number of inputs	8	8
Output Type	Mosfet	Mosfet
Nominal input voltage	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)
“1" signal voltage	Open drain output	Open drain output
“0" signal voltage	Max:1.5VDC,10kΩ Load	Max:1.5VDC, 10kΩ Load
Max. output current(per Ch.)	0.5A	0.5A
Short circuit current(per Ch.)	1A	1A
Max. output current(Total.)	8A	8A
On-Resistance	0.3Ω(Type)/0.6Ω(Max.)	0.3Ω(Type)/0.6Ω(Max.)
Port protect	Overvoltage & overcurrent protection	
Analog Input		
Number of inputs	8	4
SignalType	Current	Thermal resistance,PT100,PT200,PT500,PT1000,Ni100,Ni120,Ni1000
Input impedance	＞200kΩ	-
Range	0~20mA,±20mA	100Ω...200kΩ
Resolutions	12bit	24bit,0.001℃
Total error	<±0.5%	<±0.05%Full scale
Conversion rate	100kSPS/ch	250mS/4ch
Software filter	No	0x,1x,2x,3x,4xYes
Others	-	50/60Hz filter, breakwire instructions
Analog Output		
Number of inputs	4	-
Output Range	0~10V or 0~20mA	-

Order No.	RT133-3HC10-DP	RT133-3RJ00-DP
Load	>5kΩ	-
Resolutions	12bit	-
Output error	<0.5%	-
Output settling time	~100μs	-
Voltage supply	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)
Electrical isolation(Bus/Field potential)	AC 500V	AC 500V
Protocol	Profibus DP V0	Profibus DP V0
Connector	DB9Female	DB9Female
Transmission rate	9.6kbps~12Mbps, adaptive	9.6kbps~12Mbps, adaptive
Address config	00~99(config by 2-bit dial switch)	00~99(config by 2-bit dial switch)
Installation	DIN Rail(TS35)	DIN Rail(TS35)
LED Indicate		
PWR	Green	Green
ERR	Red	Red
RUN	Orange	Orange
Digital I/O	Green	Green
Dimensions(W/H/D,mm)	155×105×55	155×105×55

Order No.	Product Description
RT133-4TJ00-DP	Digital8 Input/8 Output (Mosfet) , 4 Thermocouple
RT131-4RH00-DP	16Thermal Resistance
RT131-4TH00-DP	16 Thermocouple

Order No.	RT133-4TJ00-DP	RT131-4RH00-DP
Type	Temperature module	Temperature module
Digital Input		
Number of Inputs	8	-
Input filter	0.5ms	-
Nominal input voltage	24 V DC(-15%/+20%)	-
“1” signal voltage		-
“0” signal voltage		-
Port protect	Impact over voltage protection	-
Digital Output		
Number of Inputs	8	-
Output Type	Mosfet	-
Nominal input voltage	24 V DC(-15%/+20%)	-
“1” signal voltage	Open drain output	-
“0” signal voltage	Max:1.5VDC,10kΩ Load	-
Max. output current(per Ch.)	0.5A	-
Short circuit current(per Ch.)	1A	-
Max. output current(Total.)	8A	-
On-Resistance	0.3Ω(type)/0.6Ω(Max.)	-
Port protect	overvoltage & overcurrent protection	-
Analog Input		
Number of Inputs	4	16
Signal Type	All type of thermocouple sensor	RTD,PT100,PT200,PT500,PT1000,Ni100,Ni120,Ni1000
Input impedance	＞100kΩ	-
Range	±100mV	100Ω...200kΩ
Resolutions	24bit,0.001℃	24bit, 0.001℃
Total error	＜±0.05%Full scale	＜±0.05%Full scale
Conversion rate	250mS/4ch	1000mS/8ch
Software filter	0x,1x,2x,3x,4xadjustable	0x,1x,2x,3x,4xadjustable
Others	50/60Hz filter,cold junction compensation	50/60Hz filter
Voltage supply	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)
Electrical isolation(Bus/Field potential)	AC 500V	AC 500V
Protocol	Profibus DP V0	Profibus DP V0

Order No.	Product Description
RT133-4TJ00-DP	Digital8 Input/8 Output (Mosfet) , 4 Thermocouple
RT131-4RH00-DP	16Thermal Resistance
RT131-4TH00-DP	16 Thermocouple

Order No.	RT131-4TH00-DP
Type	Temperature module
Digital Input	
Number of Inputs	-
Input filter	-
Nominal input voltage	-
“1” signal voltage	-
“0” signal voltage	-
Port protect	-
DigitalOutput	
Number of Inputs	-
Output Type	-
Nominal input voltage	-
“1” signal voltage	-
“0” signal voltage	-
Max. output current(per Ch.)	-
Short circuit current(per Ch.)	-
Max. output current(Total.)	-
On-Resistance	-
Port protect	-
Analog Input	
Number of Inputs	16
Signal Type	All type of thermocouple sensor
Input impedance	＞100kΩ
Range	±100mV
Resolutions	24bit, 0.001℃
Total error	＜±0.05%Full scale
Conversion rate	1000mS/8ch
Software filter	0x,1x,2x,3x,4xadjustable
Others	50/60Hz filter,cold junction compensation
Voltage supply	24 V DC(-15%/+20%)
Electrical isolation(Bus/Field potential)	AC 500V
Protocol	Profibus DP V0

Order No.	RT133-4TJ00-DP	RT131-4RH00-DP
Connector	DB9Female	DB9Female
Communication Rate	9.6kbps~12Mbps, adaptive	9.6kbps~12Mbps, adaptive
Address config	00~99(config by 2-bit dial switch)	00~99(config by 2-bit dial switch)
Fixed method	DIN Rail(TS35)	DIN Rail(TS35)
LED Indicate		
PWR	Green	Green
ERR	Red	Red
DE Data exchage	Orange	Orange
Digital I/O	Green	Green
Dimensions(W/H/D,mm)	155×105×55	155×105×55

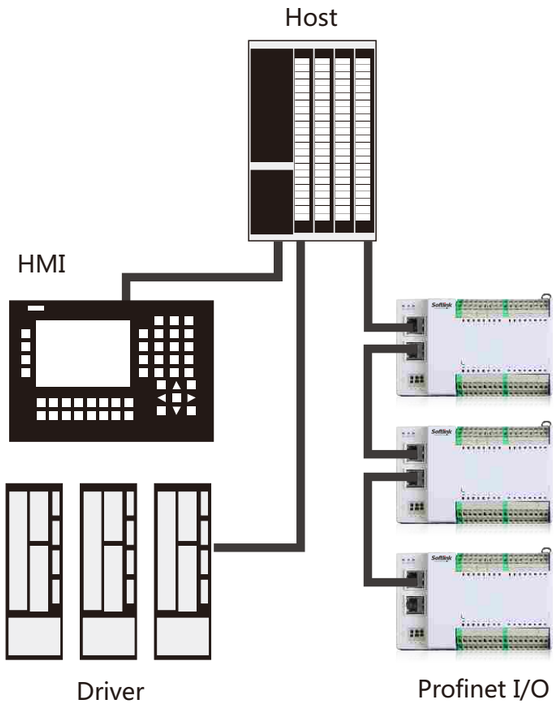
Order No.	RT131-4TH00-DP
Connector	DB9Female
Communication Rate	9.6kbps~12Mbps, adaptive
Address config	00~99(config by 2-bit dial switch)
Fixed method	DIN Rail(TS35)
PWR	Green
ERR	Red
DE Data exchage	Orange
Digital I/O	Green
Dimensions(W/H/D,mm)	155×105×55

Order No.	Product Description	Order No.	Product Description
RT131-1BL00-PN	Digital32 Input	RT133-1BL00-PN	Digital16 Input/16 Output (Mosfet)
RT132-1BL00-PN	Digital32 Output (Mosfet)	RT133-1PL00-PN	Digital16 Input/16 Output (Relay)

Order No.	RT131-1BL00-PN	RT132-1BL00-PN
Type	DigitalInput Module	DigitalOutput Module
Digital Input		
Number of Inputs	32	0
Input filter	0.5ms	-
Nominal input voltage	24 V DC(-15%/+20%)	-
“1” signal voltage	15~30VDC,7mA	-
“0” signal voltage	0~5VDC	-
Port protect	Impact over voltage protection	-
Digital Output		
Number of Inputs	0	32
Output Type	-	Mosfet
Nominal input voltage	-	24 V DC(-15%/+20%)
“1” signal voltage	-	Open drain output
“0” signal voltage	-	Max:1.5VDC,10kΩ Load
Max. output current(per Ch.)	-	0.5A
Short circuit current(per Ch.)	-	1A
Max. output current(Total.)	-	8A*2
On-Resistance	-	0.3Ω(type)/0.6Ω(Max.)
Port protect	-	Over voltage & overcurrent protection
Voltage supply	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)
Electrical isolation(Bus/Field potential)	AC 500V	AC 500V
Protocol	PROFINET IO IRT	PROFINET IO IRT
Connector	2 x RJ45	2 x RJ45
Communication Rate	100 Mbps full duplex	100 Mbps full duplex
Address config	MAC+IP	MAC+IP
Fixed method	DIN Rail(TS35)	DIN Rail(TS35)
Fixed method	T.B.D	T.B.D
LED Indicate		
PWR	Green	Green
BFBus failure	Red	Red
SFSystem failure	Red	Red
MTMaintain	Orange	Orange

Order No.	Product Description	Order No.	Product Description
RT131-1BL00-PN	Digital32 Input	RT133-1BL00-PN	Digital16 Input/16 Output (Mosfet)
RT132-1BL00-PN	Digital32 Output (Mosfet)	RT133-1PL00-PN	Digital16 Input/16 Output (Relay)

Order No.	RT133-1BL00-PN	RT133-1PL00-PN
Type	DigitalI/O Module	DigitalI/O Module
Digital Input		
Number of Inputs	16	16
Input filter	0.5ms	0.5ms
Nominal input voltage	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)
“1” signal voltage	15~30VDC,7mA	15~30VDC,7mA
“0” signal voltage	0~5VDC	0~5VDC
Port protect	Impact over voltage protection	Impact over voltage protection
Digital Output		
Number of Inputs	16	16
Output Type	Mosfet	Relay
Nominal input voltage	24 V DC(-15%/+20%)	30 V DC/250V AC
“1” signal voltage	Open drain output	Relay干接点闭合
“0” signal voltage	Max:1.5VDC,10kΩ Load	Relay干接点断开
Max. output current(per Ch.)	0.5A	1A
Short circuit current(per Ch.)	1A	2A
Max. output current(Total.)	8A	16A
On-Resistance	0.3Ω(type)/0.6Ω(Max.)	≤50mΩ
Port protect	Over voltage & overcurrent protection	-
Voltage supply	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)
Electrical isolation(Bus/Field potential)	AC 500V	AC 500V
Protocol	PROFINET IO IRT	PROFINET IO IRT
Connector	2 x RJ45	2 x RJ45
Communication Rate	100 Mbps full duplex	100 Mbps full duplex
Address config	MAC+IP	MAC+IP
Fixed method	DIN Rail(TS35)	DIN Rail(TS35)
Fixed method	T.B.D	T.B.D
LED Indicate		
PWR	Green	Green
Bus failure	Red	Red
System failure	Red	Red
Maintain	Orange	Orange



Profinet is a fielbus standard based on industrial Ethernet technology introduced by PROFIBUS International (PROFIBUS International, PI). Profinet features a complete solution for different needs including eight modules, followed by real-time communication, distributed field devices, motion control, distributed automation, network installation, IT standards and information security, and fail-safe process automation. Depending on the response time, PROFINET supports three types of communication, TCP / IP standard communications, real-time (RT) communications and isochronous real-time (IRT) communication. PROFINET can constitute almost unlimited network size, network length of 10 / 100Base-T = 100m.

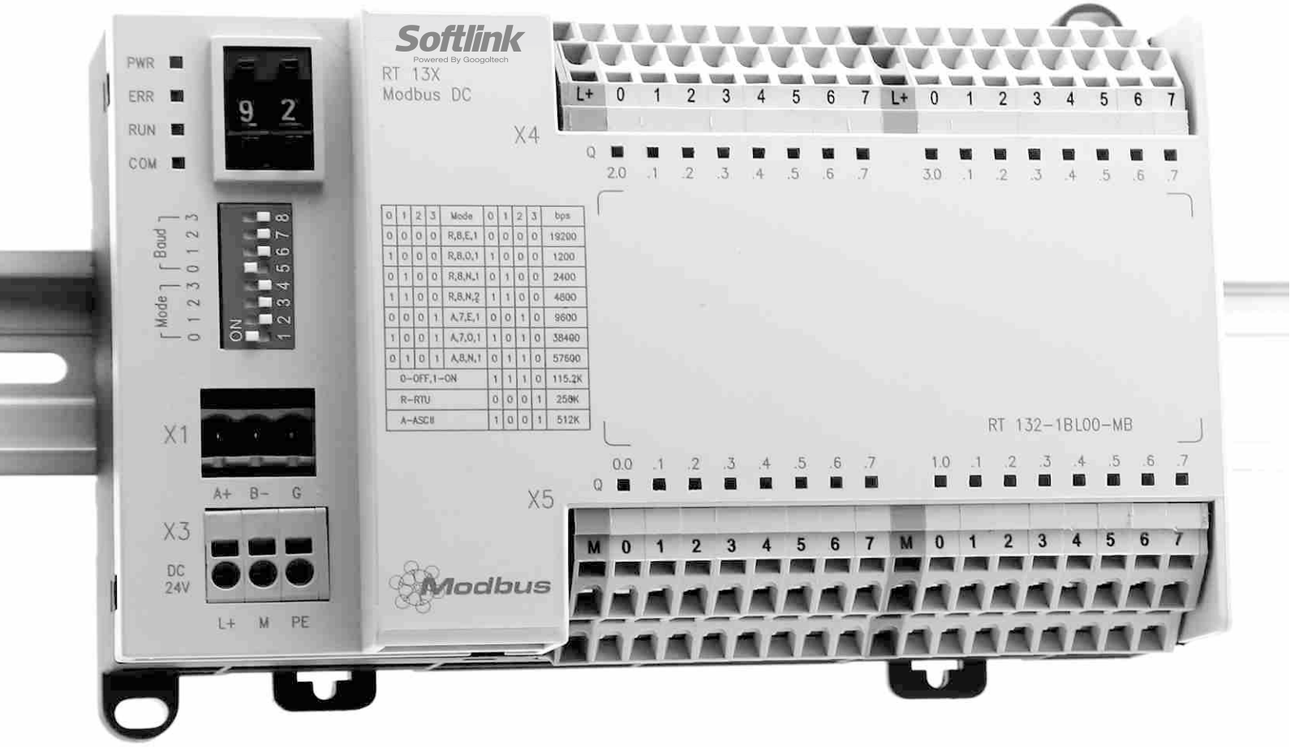
iModule series of Profinet I /O connect distributed devices to a high-speed network, featuring reliable, high-speed, real-time, high immunity and compatibility characteristics.

Order No.	RT131-1BL00-PN	RT132-1BL00-PN	RT133-1BL00-PN	RT133-1PL00-PN
RDYReady	Green	Green	Green	Green
Digital I/O	Green	Green	Green	Green
Dimensions(W/H/D,mm)	155×105×55	155×105×55	155×105×55	155×105×55

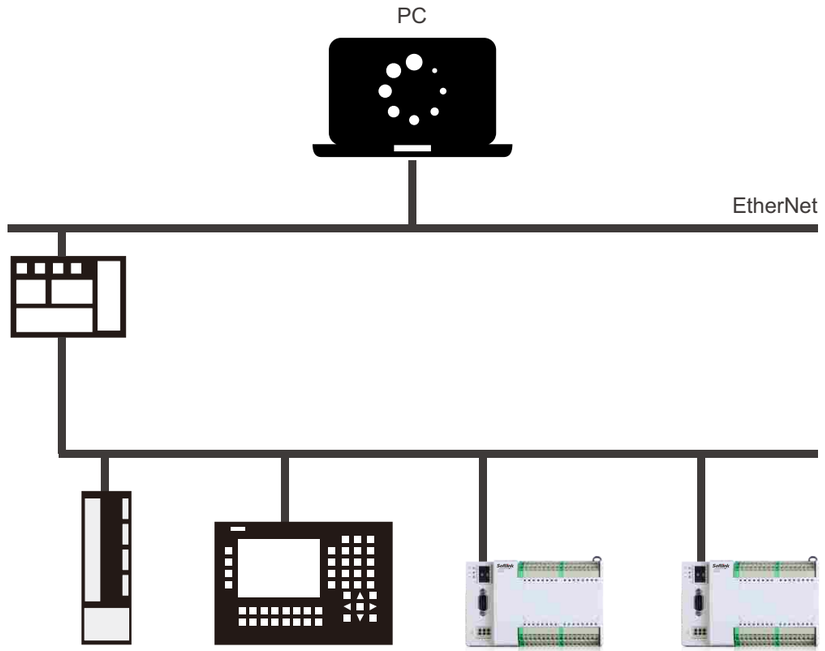
Order No.	Specification
RT133-3FC00-PN	Digital8 Input/8 Output（Mosfet），Analog8 InputVoltage/4 Output
RT133-3FC10-PN	Digital8 Input/8 Output（Mosfet），Analog8 InputCurrent/4 Output

Order No.	RT133-3FC00-PN	RT133-3FC10-PN
Type	MixedSignalI/O Module	MixedSignalI/O Module
Digital Input		
Number of Inputs	8	8
Input filter	0.5ms	0.5ms
Nominal input voltage	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)
“1” signal voltage	15~30VDC,7mA	15~30VDC,7mA
“0” signal voltage	0~5VDC	0~5VDC
Port protect	Impact over voltage protection	Impact over voltage protection
Digital Output		
Number of Inputs	8	8
Output Type	Mosfet	Mosfet
Nominal input voltage	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)
“1” signal voltage	Open drain output	Open drain output
“0” signal voltage	Max:1.5VDC,10kΩ Load	Max:1.5VDC,10kΩ Load
Max. output current(per Ch.)	0.5A	0.5A
Short circuit current(per Ch.)	1A	1A
Max. output current(Total.)	4A	4A
On-Resistance	0.3Ω(type)/0.6Ω(Max.)	0.3Ω(type)/0.6Ω(Max.)
Port protect	Over voltage & overcurrent protection	Over voltage & overcurrent protection
Analog Input		
Number of Inputs	8	8
Signal Type	Single-ended Voltage	Single-ended Voltage
Input impedance	＞200kΩ	249Ω
Range	0~5V,0~10V,±1.25V,±2.5V,±5V,±10V	0~5V,0~10V,±1.25V,±2.5V,±5V,±10V
Resolutions	16bit	16bit
Total error	＜±0.1%	＜±0.1%
Conversion rate	100kSPS/ch	100kSPS/ch
Analog Output		
Number of Inputs	4	4
OutputRange	0~10V or 0~20mA	0~10V or 0~20mA
Load	＞5kΩ	＞5kΩ
Resolutions	16bit	16bit

Order No.	RT133-3FC00-PN	RT133-3FC10-PN
Output Error	＜0.1%	＜0.1%
Output settling time	~100 μs	~100 μs
Voltage supply	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)
Electrical isolation (Bus/Field potential)	AC 500V	AC 500V
Protocol	PROFINET IO IRT	PROFINET IO IRT
Connector	2 x RJ45	2 x RJ45
Communication Rate	100 Mbps full duplex	100 Mbps full duplex
Address config	MAC+IP	MAC+IP
Fixed method	DIN Rail(TS35)	DIN Rail(TS35)
Distributed clocks	T.B.D	T.B.D
LED Indicate		
PWR	Green	Green
Bus failure	Red	Red
System failure	Red	Red
Maintain	Orange	Orange
Ready	Green	Green
Digital I/O	Green	Green
Dimensions(W/H/D,mm)	155×105×55	155×105×55



0	1	2	3	Mode	0	1	2	3	bps
0	0	0	0	R,8,E,1	0	0	0	0	19200
1	0	0	0	R,8,O,1	1	0	0	0	1200
0	1	0	0	R,8,N,1	0	1	0	0	2400
1	1	0	0	R,8,N,2	1	1	0	0	4800
0	0	0	1	A,7,E,1	0	0	1	0	9600
1	0	0	1	A,7,O,1	1	0	1	0	38400
0	1	0	1	A,8,N,1	0	1	1	0	57600
0-OFF,1-ON					1	1	1	0	115.2K
R-RTU					0	0	0	1	256K
A-ASCII					1	0	0	1	512K



Modbus is one of the industrial field bus protocols. ModBus network has only one host. All communications issued by the host, this protocol supports traditional RS-232, RS-422, RS-485 and Ethernet devices. There are two kinds of transmission modes to choose from the ModBus system, a model to ASCII, another mode is RTU, the network can support as many as 247 remote slave controllers, but the actual number of slaves depend on the used communication equipment.

Module series Modbus-RTU remote I / O can be connected into a network with programmable logic controllers, RTU, SCADA systems, third-party devices defined by DCS Modbus protocol, to build a variety of complex monitoring systems, and to facilitate maintenance and extension of the system.

Order No.	Product Description
RT131-1BL00-MB	Digital32 Input
RT132-1BL00-MB	Digital32 Output (Mosfet)
RT133-1BL00-MB	Digital16 Input , 16 Output (Mosfet)

Order No.	RT131-1BL00-MB	RT132-1BL00-MB
Type	DigitalInput Module	DigitalOutput Module
Digital Input		
Number of Inputs	32	-
Input filter	0.5ms	-
Nominal input voltage	24 V DC(-15%/+20%)	-
“1” signal voltage	15~30VDC,7mA	-
“0” signal voltage	0~5VDC	-
Port protect	Impact over voltage protection	-
Digital Output		
Number of Inputs	-	32
Output Type	-	Mosfet
Nominal input voltage	-	24 V DC(-15%/+20%)
“1” signal voltage	-	Open drain output
“0” signal voltage	-	Max:1.5VDC,10kΩ Load
Max. output current(per Ch.)		0.5A
Short circuit current(per Ch.)		1A
Max. output current(Total.)	-	8A
On-Resistance	-	0.3Ω(type)/0.6Ω(Max.)
Port protect	-	Over voltage & overcurrent protection
Voltage supply	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)
Electrical isolation(Bus/Field potential)	AC 500V	AC 500V
Protocol	Modbus RTU/ASCII	Modbus RTU/ASCII
Physical layer	RS-485	RS-485
Connector	Pluggable connector(3Pin,A/B/GND)	Pluggable connector(3Pin,A/B/GND)
Communication Rate	1200bps~512kbps(config by 8-bit dial switch)	1200bps~512kbps(config by 8-bit dial switch)
Address config	00~99(config by 2-bit dial switch)	00~99(config by 2-bit dial switch)
LED Indicate		
PWR	Green	Green
ERR	Red	Red
RUN	Orange	Orange
Digital I/O	Green	Green
Dimensions(W/H/D,m m)	155×105×55	155×105×55

Order No.	Product Description
RT131-1BL00-MB	Digital32 Input
RT132-1BL00-MB	Digital32 Output (Mosfet)
RT133-1BL00-MB	Digital16 Input , 16 Output (Mosfet)

Order No.	RT133-1BL00-MB	RT133-1PL00-MB
Type	DigitalI/O Module	DigitalI/O Module
Digital Input		
Number of Inputs	16	16
Input filter	0.5ms	0.5ms
Nominal input voltage	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)
“1” signal voltage	15~30VDC,7mA	15~30VDC,7mA
“0” signal voltage	0~5VDC	0~5VDC
Port protect	Impact over voltage protection	Impact over voltage protection
Digital Output		
Number of Inputs	16	16
Output Type	Mosfet	Relay
Nominal input voltage	24 V DC(-15%/+20%)	30 V DC/250V AC
“1” signal voltage	Open drain output	Relay Dry contact short circuit
“0” signal voltage	Max:1.5VDC,10kΩ Load	Relay Dry contact short circuit
Max. output current(per Ch.)	0.5A	1A
Short circuit current(per Ch.)	1A	2A
Max. output current(Total.)	8A	16A
On-Resistance	0.3Ω(type)/0.6Ω(Max.)	≤50mΩ
Port protect	Over voltage & overcurrent protection	-
Voltage supply	24 V DC(-15%/+20%)	24 V DC(-15%/+20%)
Electrical isolation(Bus/Field potential)	AC 500V	AC 500V
Protocol	Modbus RTU/ASCII	Modbus RTU/ASCII
Physical layer	RS-485	RS-485
Connector	Pluggable connector(3Pin,A/B/GND)	Pluggable connector(3Pin,A/B/GND)
Communication Rate	1200bps~512kbps(config by 8-bit dial switch)	
Address config	00~99(config by 2-bit dial switch)	00~99(config by 2-bit dial switch)
LED Indicate		
PWR	Green	Green
ERR	Red	Red
RUN	Orange	Orange
Digital I/O	Green	Green
Dimensions(W/H/D,mm)	155×105×55	155×105×55

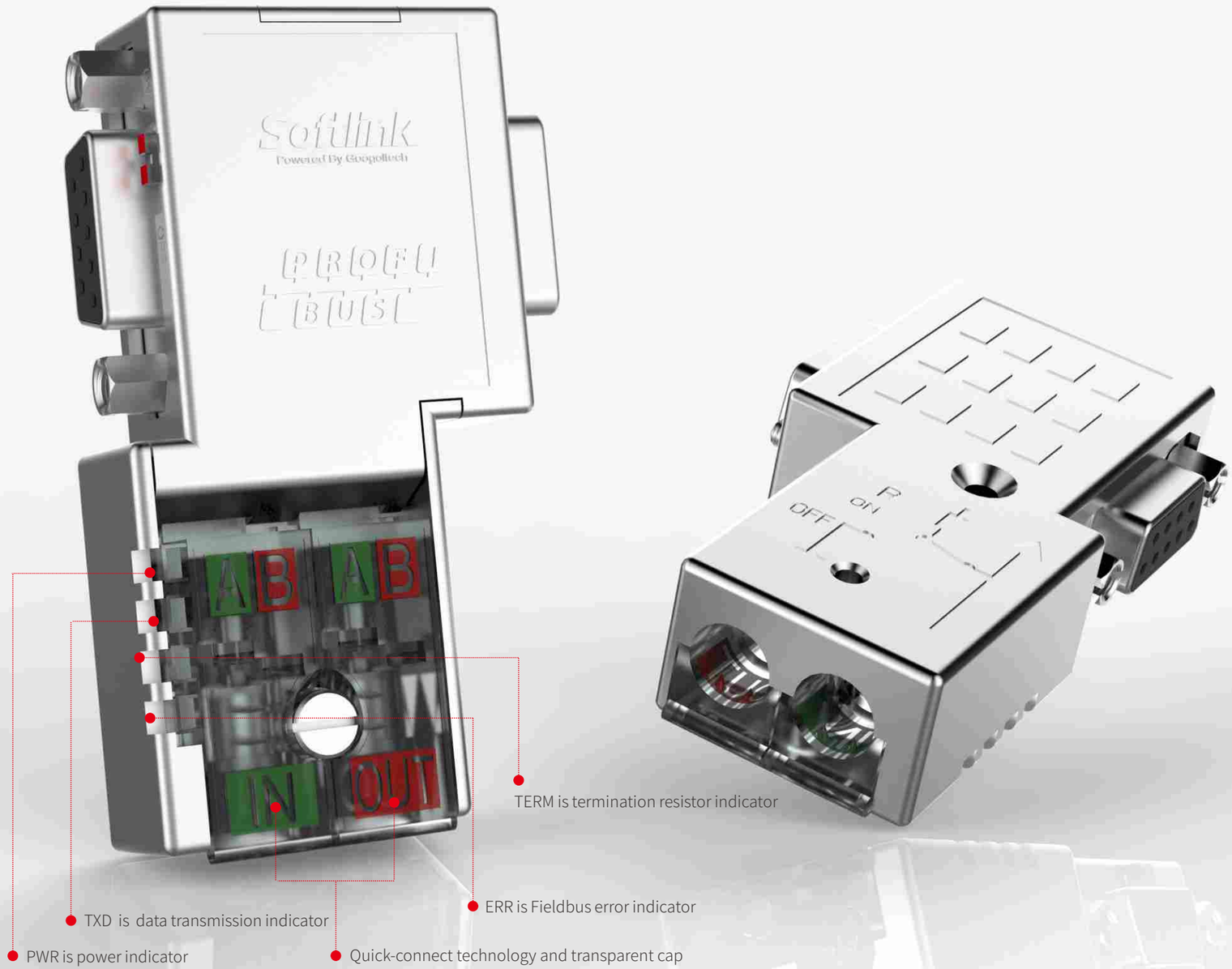
iMetal

02

iMetal Fieldbus Connector

iMetal series of Fieldbus connectors offer an extensive range of connection modes and qualifications for fielbus components. The metal-shielded connectors have a strong immunity to high-frequency interference and guarantee a smooth communication in any harsh industrial environment. Self diagnostic Fieldbus connectors have LED indicators to show status of the network and the Fieldbus connectors.

iMetal



Fieldbus Connector

SOFTLINK's iMetal Fieldbus connectors offer three outlet modes: 35°,90°, and 180°. And the 90°metal-shielded Fieldbus connector adopts quick-connect technology, which could save time and make installation efficiency substantially. With transparent caps, it is more convenient to check the connection.

Self-diagnostic Fieldbus connector

Self-diagnostic Field-bus connectors have PWR, TXD,TERM, ERR LED indicators to show the working status or fault status of the network and the Fieldbus

- PWR is power indicator
- TERM is termination resistor indicator
- TXD is data transmission indicator
- ERR is Fieldbus error indicator

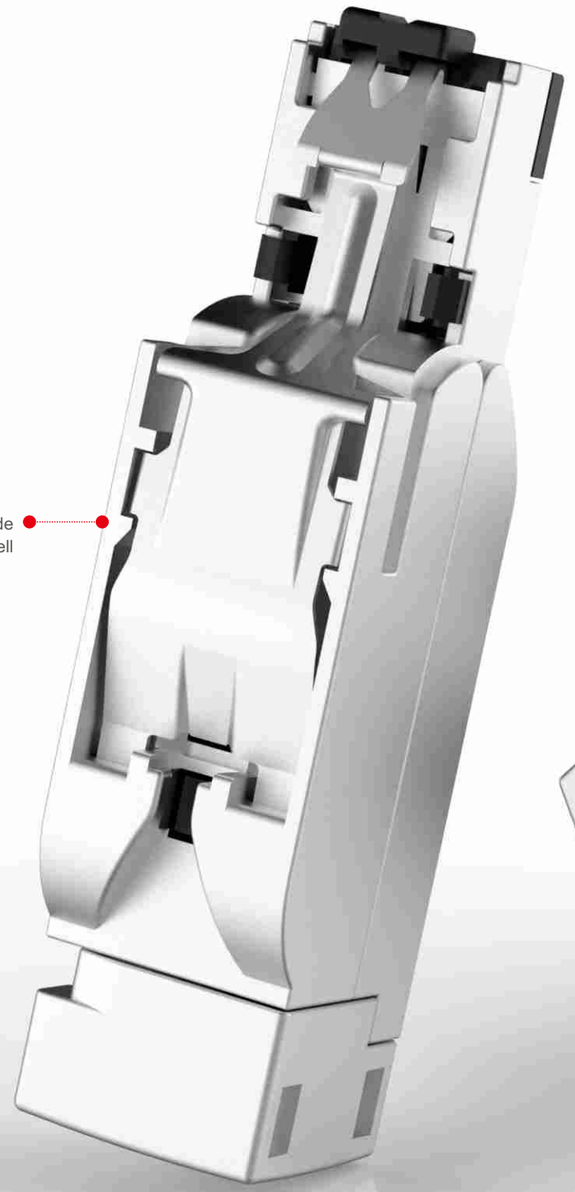
Optoelectronic isolation Fieldbus connector

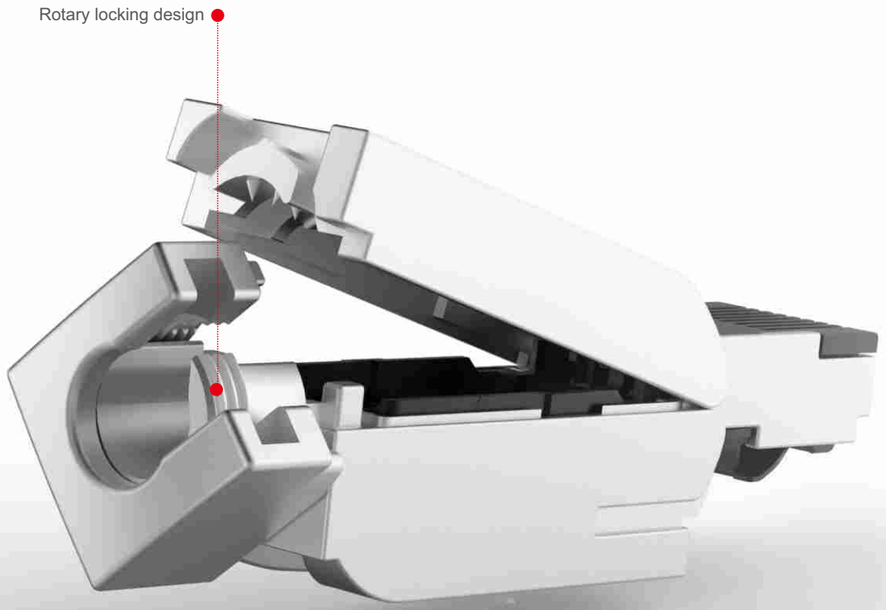
Optoelectronic isolation PROFIBUS connector adopts high-speed optoelectronic isolation technology and new RS485 chip to enhance drive capability greatly and minimize EMI in any harsh electromagnetic environment. Optoelectronic isolation also solve the problem of frequently damaged communication interfaces caused by the electrical potential difference in network.

Product Description	Order No.
90° outlet, without programming port ,all metal	300 972-BA4200
90° outlet, with programming port,all metal	300 972-BB4200
180° outlet, without programming port	300 972-BA3000
90°outlet, without programming port	300 972-BA1200
90°outlet, with programming port	300 972-BB1200
Self-diagnosis 90° outlet, without programming port,all metal	300 972-BA6100
Self-diagnosis 90° outlet, with programming port,all metal	300 972-BB6100

Product Description	Order No.
35° outlet, without programming port	300 972-BA1000
35° outlet, with programming port	300 972-BB1000
90° outlet, without programming port, fast-wiring	300 972-BA2000
90° outlet, with programming port, fast-wiring	300 972-BB2000
90° outlet, without programming port, optical isolation	300 972-BA5000
35° outlet, without all metal	300 972-BA4100
35° outlet, with all metal	300 972-BB4100

iMetal

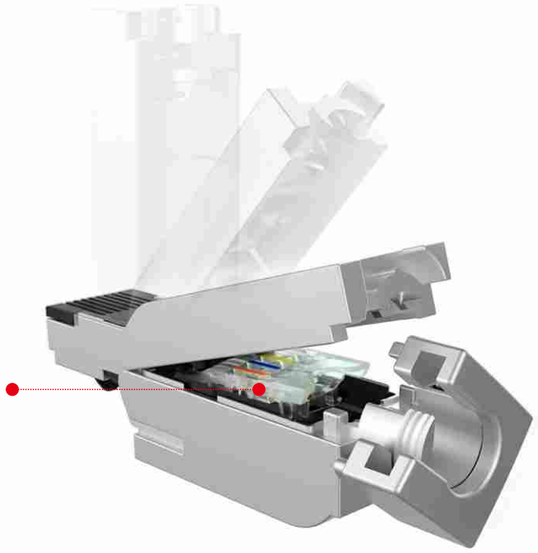




RJ45 Fieldbus Connector

Compatible with Profinet,Ethercat, and CANopen cables, iMetal series of RJ45 connector enable a fast and easily connection, even in the harsh environment.

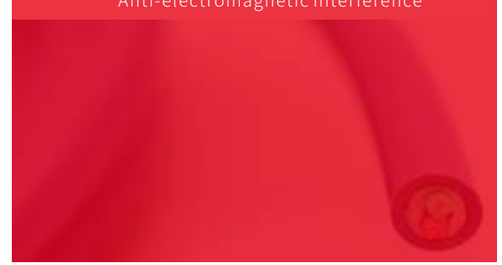
- Quick-connect technology, easily connected with quad twisted pair
- Transparent cap and colorful blade terminal to prevent wiring errors
- Industrial grade aluminum metal shell, safe and reliable
- Rotary locking design, without screws
- Transfer rate up to 100M



03

Fieldbus cable

Flame resistance,
Anti-oil,
Low smoke and halogen-free,
Multi-layer shielding,
Anti-electromagnetic interference



EtherCAT CANopen Modbus

PROFINET PROFIBUS

Interface	
Industrial Ethernet FC standard interface	4 integrated insulation piercing contacts
Industrial Ethernet RJ45 interface	One RJ45 interface
Baud rate	100MBit/S
Extension	
TP Cable Length	0-100M
Temperature	
Working Temperature	-20℃-70℃
Transport/ Storage Temperature	-40℃-80℃
Relative Humidity	<95%
Design	
Dimensions (W×H×D) mm	13.6×16×53.6
Weight	40g
Degree of Protection	IP20

Product Description	Order No.
180°Field-bus connector	300 901-1BB10
90°Field-bus connector	300 901-1BG10

Product Description	Order No.
Profibus DP Cable	830-0EH10
Profibus DP Flexible cable	830-3EH10

Product Description	Order No.
CANopen Cable	830-CA02
EtherCAT/Profinet Cable	840-2AH10

Remote I/O

EtherCAT

Order No.	Product Description
RT131-1BL00-EA	Digital32 Input
RT132-1BL00-EA	Digital32 Output (Mosfet)
RT133-1BL00-EA	Digital16 Input/16 Output (Mosfet)
RT133-1PL00-EA	Digital16 Input/16 Output (Relay)
RT133-3FC00-EA	Digital8 Input/8 Output (Mosfet) ，Analog8 InputVoltage/4 Output
RT133-3FC10-EA	Digital8 Input/8 Output (Mosfet) ，Analog8 InputCurrent/4 Output

CANopen

Order No.	Product Description
RT131-1BL00-CAN	Digital32 Input
RT132-1BL00-CAN	Digital32 Output (Mosfet)
RT133-1BL00-CAN	Digital16 Input/16 Output (Mosfet)
RT133-1PL02-CAN	Digital16 Input/16 Output (Relay)
RT133-3HF01-CAN	Digital8 Input/8 Output (Mosfet) ，Analog12 Input/2 Output
RT133-3RJ00-CAN	Digital8 Input/8 Output (Mosfet) ，4Thermal Resistance
RT133-4TJ00-CAN	Digital8 Input/8 Output (Mosfet) ，4 Thermocouple
RT131-4RH00-CAN	16Thermal Resistance
RT131-4TH00-CAN	16 Thermocouple

PROFIBUS

Order No.	Product Description
RT131-1BL02-DP	Digital32 Input
RT132-1BL02-DP	Digital32 Output (Mosfet)
RT133-1BH02-DP	Digital8 Input/8 Output (Mosfet)
RT133-1BL02-DP	Digital16 Input/16 Output (Mosfet)
RT133-1PL02-DP	Digital16 Input/16 Output (Relay)
RT133-3FC00-DP	Digital8 Input/8 Output (Mosfet) ，Analog8 InputVoltage/4 Output
RT133-3FC10-DP	Digital8 Input/8 Output (Mosfet) ，Analog8 InputCurrent/4 Output
RT133-3KB00-DP	Digital16 Input/8 Output (Mosfet) ，Analog4 Input(Voltage/Current)
RT133-3HC10-DP	Digital8 Input/8 Output (Mosfet) ，Analog8 InputVoltage/4 Output
RT133-3RJ00-DP	Digital8 Input/8 Output (Mosfet) ，4Thermal Resistance
RT133-4TJ00-DP	Digital8 Input/8 Output (Mosfet) ，4 Thermocouple
RT131-4RH00-DP	16Thermal Resistance
RT131-4TH00-DP	16 Thermocouple

Modbus

Order No.	Product Description
RT131-1BL00-MB	Digital32 Input
RT132-1BL00-MB	Digital32 Output (Mosfet)
RT133-1BL00-MB	Digital16 Input，16 Output (Mosfet)
RT133-1PL00-MB	Digital16 Input，16 Output (Relay)

PROFINET

Order No.	Product Description
RT131-1BL00-PN	Digital32 Input
RT132-1BL00-PN	Digital32 Output (Mosfet)
RT133-1BL00-PN	Digital16 Input/16 Output (Mosfet)
RT133-1PL00-PN	Digital16 Input/16 Output (Relay)
RT133-3FC00-PN	Digital8 Input/8 Output (Mosfet) ，Analog8 InputVoltage/4 Output
RT133-3FC10-PN	Digital8 Input/8 Output (Mosfet) ，Analog8 InputCurrent/4 Output

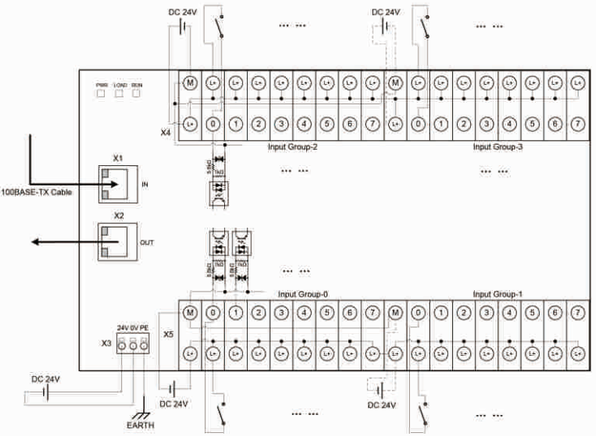
Fieldbus Connector

Order No.	Product Description
300 972-BA1000	35° outlet, without programming port
300 972-BB1000	35° outlet, with programming port
300 972-BA2000	90° outlet, without programming port, fast-wiring
300 972-BB2000	90° outlet, with programming port, fast-wiring
300 972-BA3000	180° outlet, without programming port
300 972-BA1200	90° outlet, without programming port
300 972-BB1200	90° outlet, with programming port
300 972-BA6000	Self-diagnosis 90° outlet, without programming port
300 972-BB6000	Self-diagnosis 90° outlet, with programming port
300 972-BA5000	90° outlet, without programming port, optical isolation
300 972-BA8000	Multi-Angle, without programming port
300 972-BB8000	Multi-Angle, with programming port
300 901-1BG10	90°Field-bus connector
300 901-1BB10	180°Field-bus connector
300 972-CA01	90°Outlet

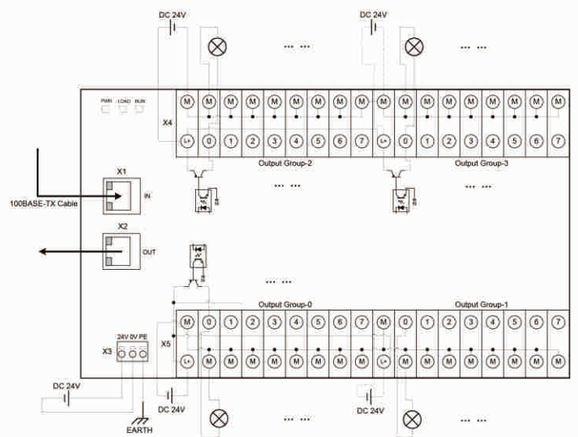
Fieldbus Cable

Order No.	Product Description
830-0EH10	Profibus DP Cable
830-3EH10	Profibus DP Flexible Cable
830-CA02	CANopen Cable
840-2AH10	EtherCAT/Profinet Cable

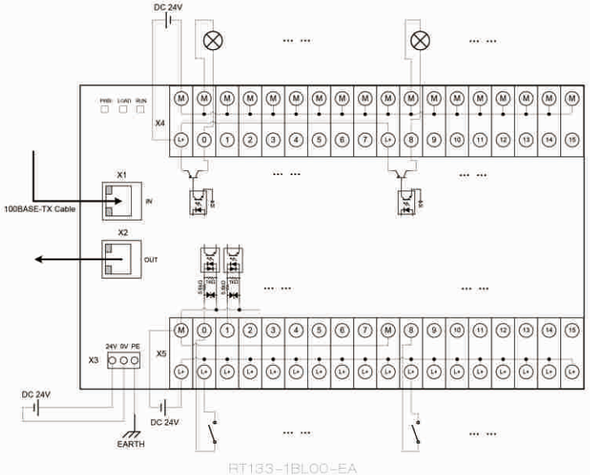
Wiring Diagram of EtherCAT Remote I/O



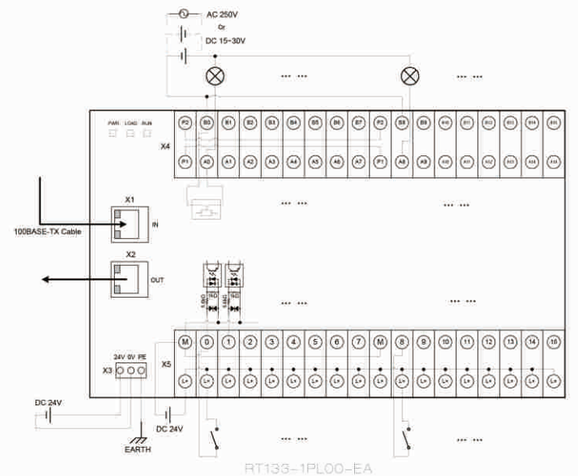
RT131-1BL00-EA



RT132-1BL00-EA



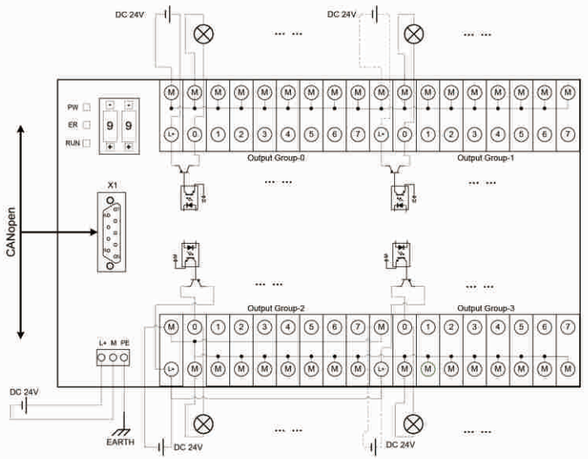
RT133-1BL00-EA



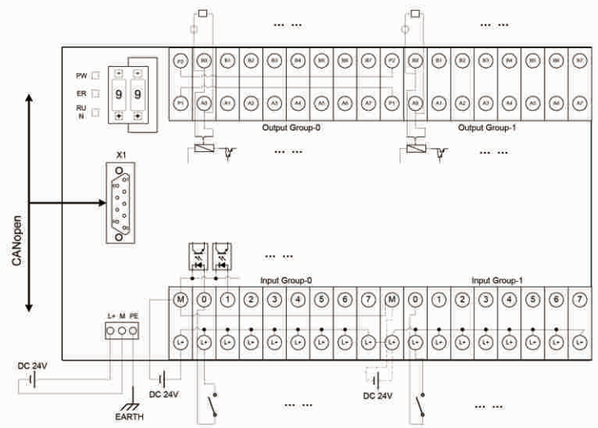
RT133-1PL00-EA

CANopen®

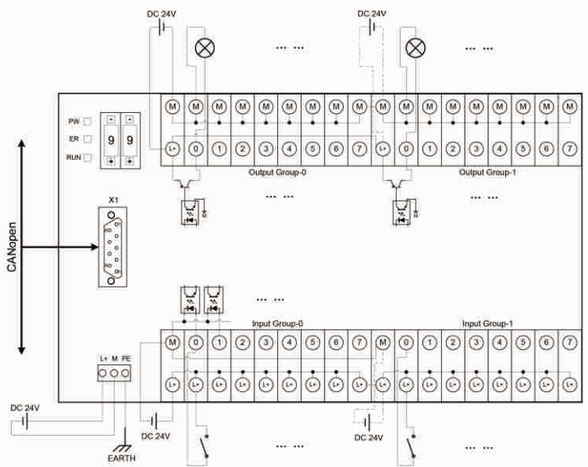
Wiring Diagram of CANopen Remote I/O



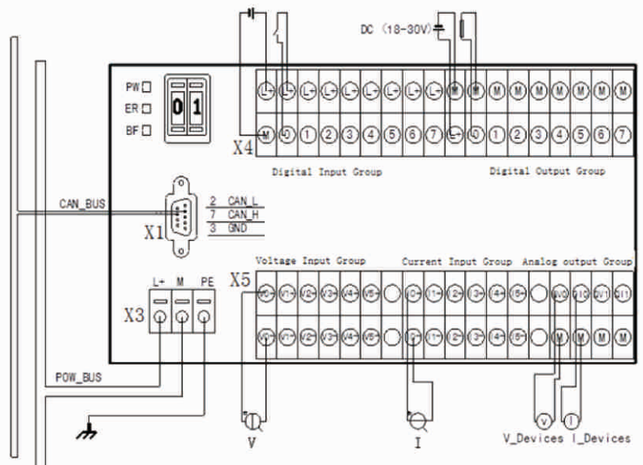
RT132-1BL00-CAN



RT133-1PL02-CAN

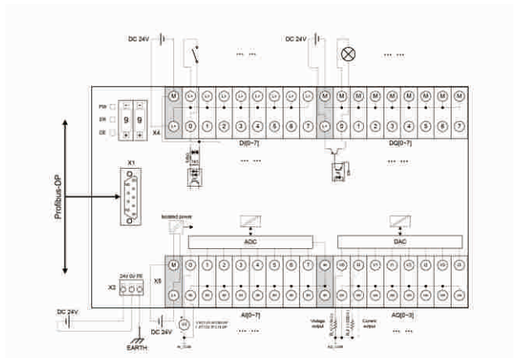


RT133-1BL00-CAN

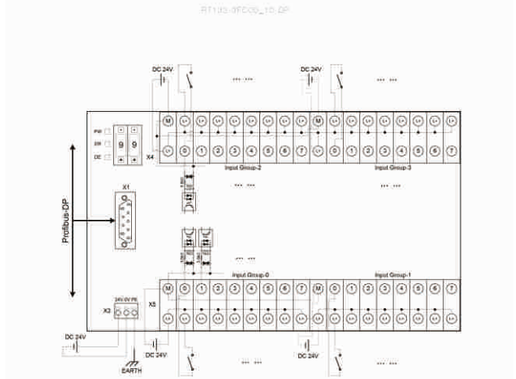


RT133-3HF00-CAN

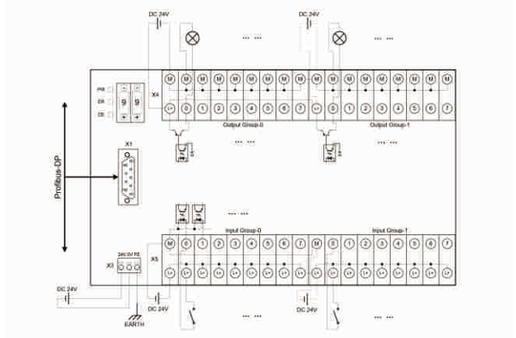
Wiring Diagram of PROFIBUS Remote I/O



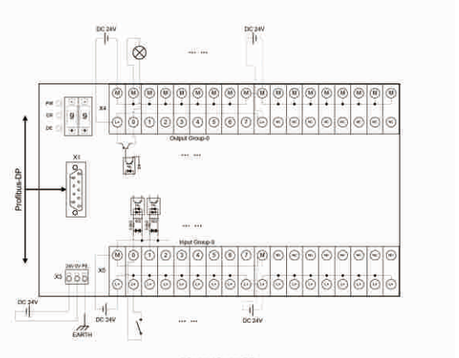
RT131-8EC00_15-DP



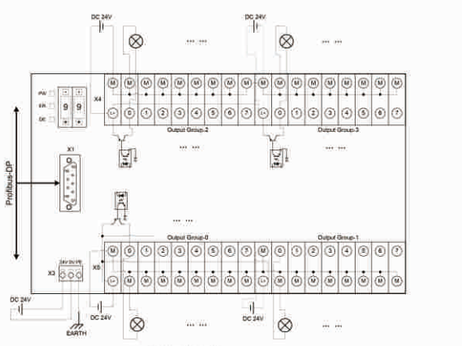
RT131-16L02-DP



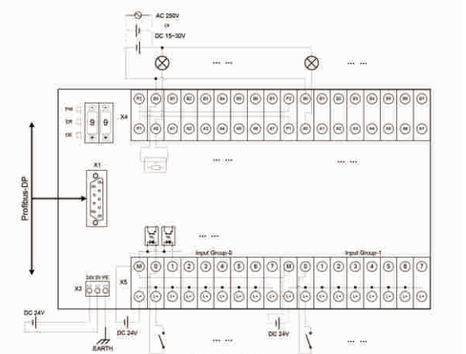
RT100-16L02-DP



RT132-16H02-DP

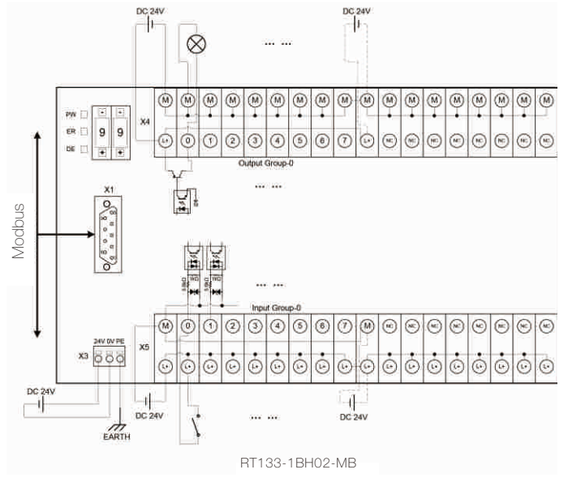


RT132-16L02-DP

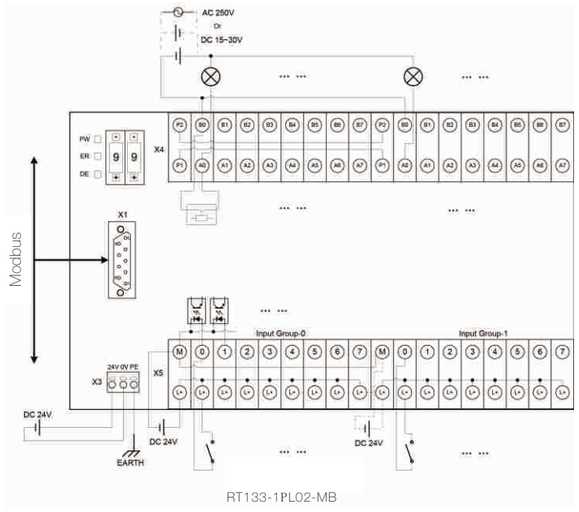


RT133-16L02-DP

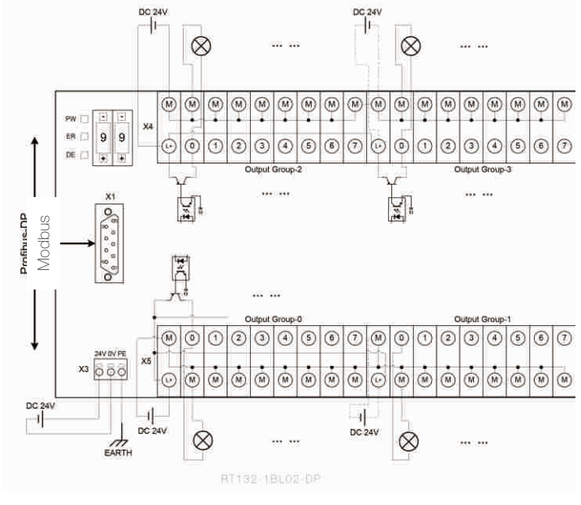
Wiring Diagram of Modbus Remote I/O



RT133-1BH02-MB



RT133-1PL02-MB



RT132-1BL02-DP

To the automation equipment away from the main control cabinet, signal transmission in long distance causes the signal attenuation and signal attenuation. However, it will not occur in the distributed Fieldbus I/O control system.

- Center process units in the main control room
- I/O distributed in every controlled devices
- **RT13X remote I/Os exchanging data with CPU**

Shell Specification
Unified shell dimension:155*105*55 (W/H/D,mm) ,IP20

Installation
Standard Din rail mounting, specification is TS35/7.5.