

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

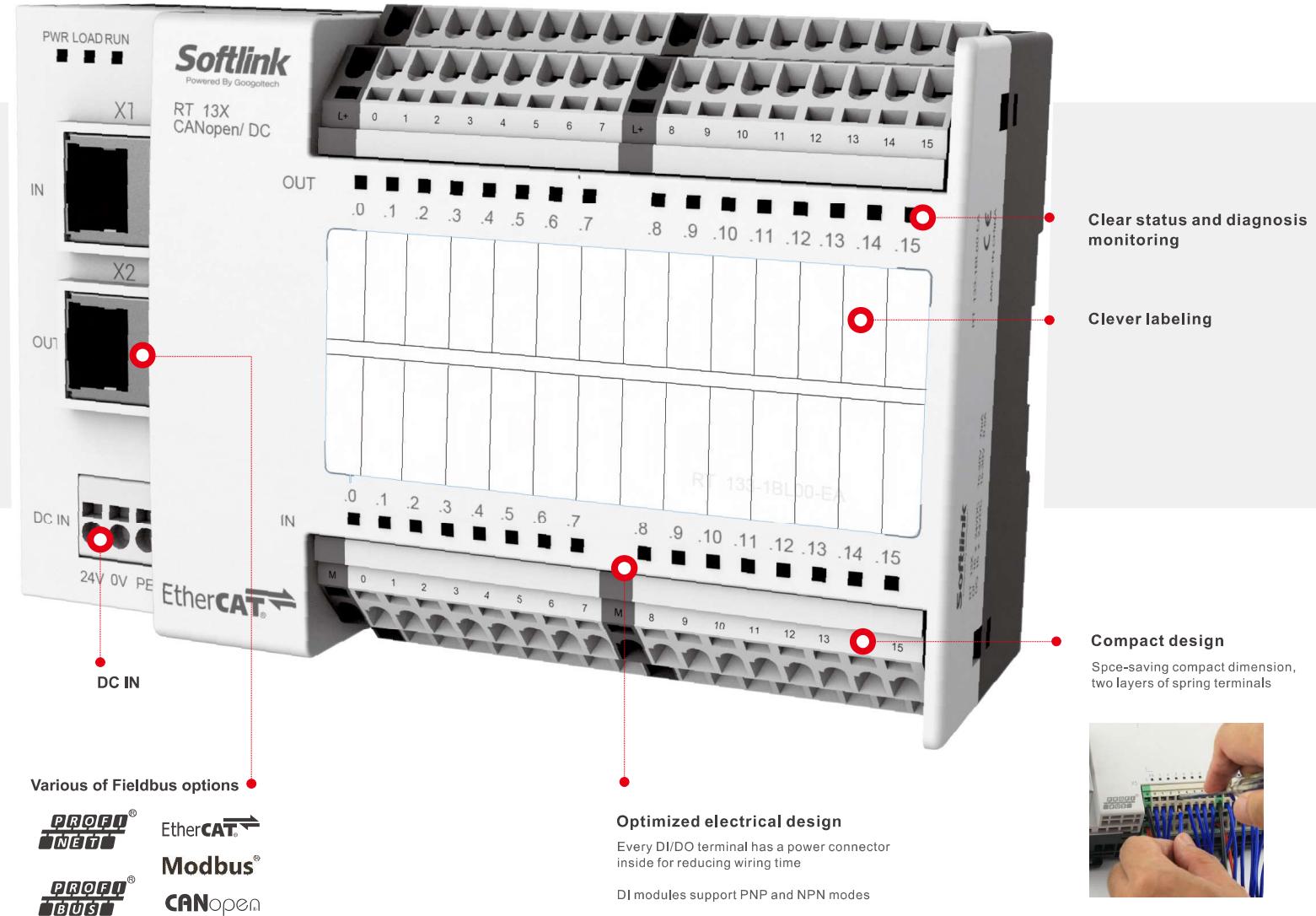
iModule series Fieldbus I/O integrated communication ports, power module, I/O module all in one, compact design and space-saving. It is widely used in various applications for stable and high cost performance.

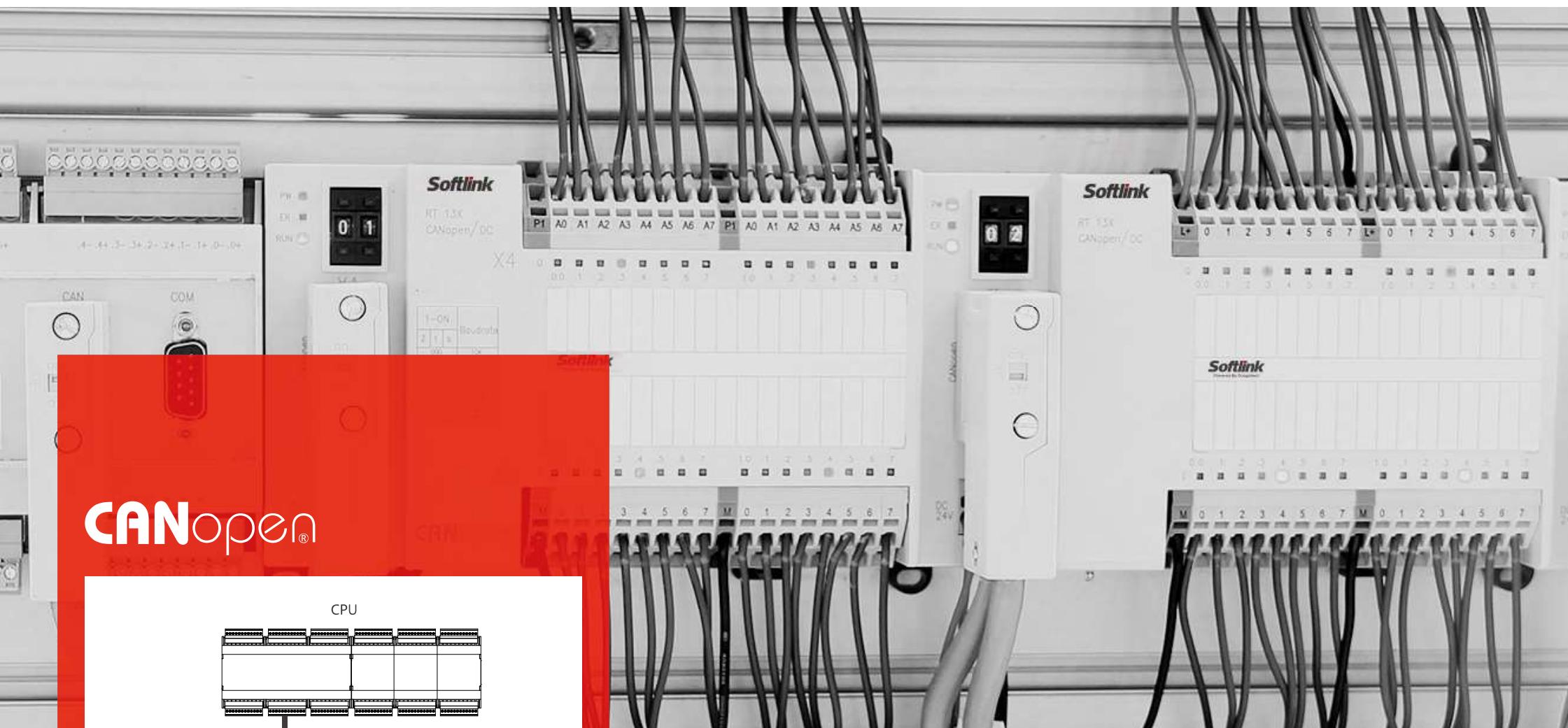
Compact design in one unit

Unified shell dimension : 155*105*55mm (W/H/D)

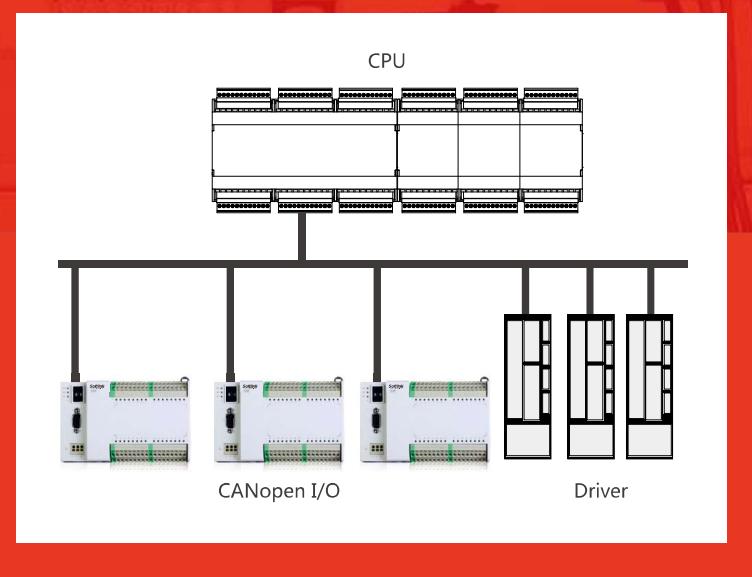
Installation : standard DIN rail mounting,
specification is TS35/7.5

IP20





CANopen®



CANopen®

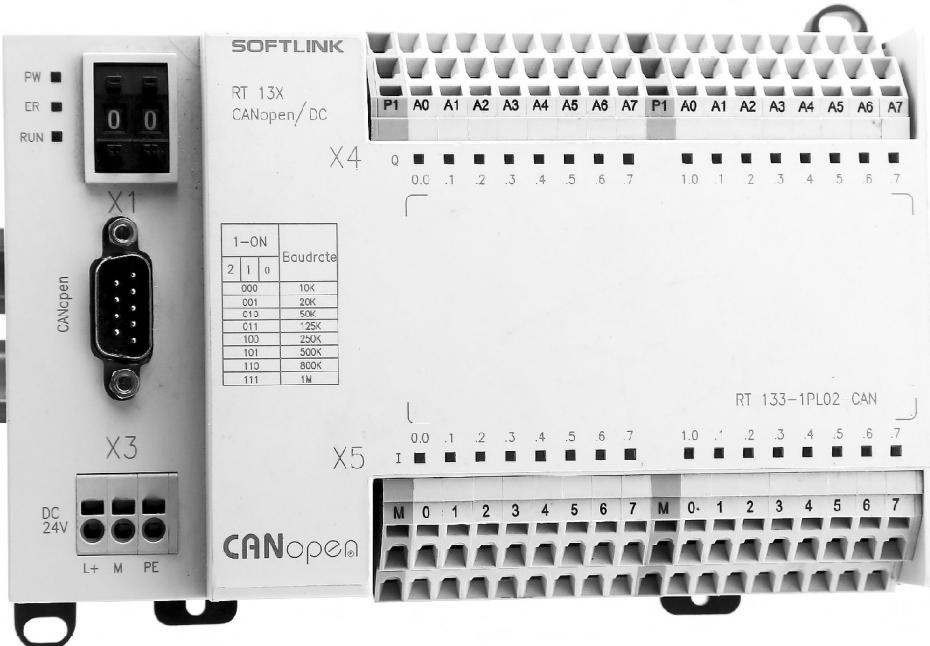
CANopen is an upper-layer communication protocol based on Controller Area Network, being one of the popular modern industry Fieldbus, drafted and developed by non-profit organization CiA (CAN in Automation). The CiA drafts standard 301 definition basic CANopen equipment and sub-agreement. The sub-agreements 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/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	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)
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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°C
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 Typethermcouple
Input impedance	> 100kΩ	-	> 100kΩ
Range	±100mV	100Ω...200kΩ	±100mV
Resolutions	24bit,0.001°C	24bit, 0.001°C	24bit,0.001°C
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

Remote I/O



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



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



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



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)



Order No.	Product Description
RT131-1BL00-PN	Digital32 Input
RT132-1BL00-PN	Digital32 Output (Mosfet)
RT133-1BL00-PN	Digital16 Input/16 Output (Mosfet)
RT133-1L00-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 CANopen Remote I/O

