### H/W Specifications

**Network Interface**
- Type: 1 x 10/100Mbps Ethernet, RJ45 connector
- Protocols: Modbus / TCP, UDP, HTTP, DHCP
- Connector: DB9, male
- Data Bits: 7, 8
- Parity: None, Even, Odd
- Baud Rate: 1.2~38.4Kbps
- Signals: TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND
- Operation Modes: TCP / Server and TCP / Client
- IP addressing: DHCP, Static IP
- Protocols: TCP, UDP, HTTP, TELNET, IP, ICMP, ARP
- Flow Control: None, RTS / CTS, XON / OFF

**Serial Interface**
- Type: RS-232 / 422 / 485, switch selectable
- Connector: DB9, male
- Type: RS-232 / 422 / 485, switch selectable
- Flow Control: None, RTS / CTS, XON / OFF

**General**
- Power Input: 9~40VDC
- Power Consumption: 70mA@+12VDC
- Operating Temperature: 0~70°C, 5~95% RH
- Dimensions (W x H x D): 78 x 108 x 25mm
- Weight: 300g
- Warranty: 5 years
- Regulation: CE / FCC compliant
- Web console, Telnet Console and Serial Console
- Connect RS-232 / 422 / 485 devices to TCP/IP network
- 8 x programmable digital I/Os
- 10/100Mbps Ethernet, 38.4Kbps serial data rate
- Supports TCP / Server mode and TCP / Client mode
- Firmware-upgradable

### Thermocouple Input

- J type: Maxim MAX31855K converter with CJC
- Range: -20°C~+1350°C
- Resolution: 14-bit, 0.25°C
- K type: Maxim MAX31855K converter with CJC
- Range: -210°C~+1200°C
- J type: Maxim MAX31855J converter with CJC
- Thermocouple fault detection
- Connector: OMEGA PCC-SMP Thermocouple connector
- Thermocouple to Digital Converter

### Features

- Remote thermocouple input module with web access AJAX and Modbus / TCP
- 1 x 10/100Mbps Ethernet port
- 3 channels J or K type thermocouple input with cold junction compensation
- 2 x 2500Vrms isolated digital input (bipolar input photocoupler)
- 1 x Form C relay with contact rating 30VDC@1A or 125VAC@0.5A
- Support web-based temperature monitoring and DIO control
- Optional DIN RAIL mounting kit (DK-35A)
- Windows utility for device configuration and management

### Ordering Information

- RIO-2018J
  - Analog Input Remote I/O Module with J type Thermocouple input channel
- RIO-2018K
  - Analog Input Remote I/O Module with K type Thermocouple input channel
- DK-3SA [36-DK3SA-000]
- PWR-12V-1A [31-62100-000]
- 110~240VAC to 12VDC 1A Power Adapter