Ci-RF11/12/21/22 S908 RIO Optical Fiber Repeater (protocol type)

- Support 1~2 S908 RIO bus, according to S908 RIO Protocol
- Support 1~2 Fiber Optic Ports, ST connector (SC, FC Optional)
- Support optical fiber link failure and bus error alarm output and LED indication
- Support Dial switch for setting communication rate
- Support Redundancy optical fiber ring network, solution cycle time＜20ms
- DC (9~36V) dual redundant power input, With DC1500V voltage isolation and reverse connect protection
- IP40 protection, Metal case (wave grain aluminum reinforce case option), 35mmDIN-Rail Installation
- Operating Temperature: -40℃ to 75℃ suitable to various Industrial work situation

Summary

This series is designed for industrial grade S908 RIO Optical Fiber Repeater, support S908 RIO protocol, Support Dial switch for setting communication rate, Support 1~2 S908 RIO bus, Support Redundancy optical fiber ring network, when fiber optic error somewhere, the system will rebuild the network link within 20ms, to guarantee the normal system communication, achieve the function of signal transmission self-healing protection, the system will recovery automatically after the network troubleshooting; this series products adopt Comark own R&D professional network protocol Ci-ring, no need any set, no need root knot, quickly finishing the network function of ring closing and ring opening, this series products can plug and play, no configuration, to simplify the user installation procedure at utmost. The product is Industrial grad designed, Casing: IP40 protection, wave grain aluminum reinforce case option, DIN rail mounting, DC(9~36v) power input, support optical fiber link failure and bus error alarm output, dual redundant power input and isolation protection. -40~75℃ Operating Temperature, can meet various Industrial situation.

Specification

Bus data interface
- Interface type: F-Type coaxial cable interface, conform to S908 RIO protocol standard
- Support S908 RIO bus standard
- Baud Rates: 1.544Mbps
- Signal Delay (electrical interface): 6bit
- constant voltage 1000V
- Resistor: without terminal resistor, connect external when necessary

Optical Interface
- Wave length: multi-mode 850nm、1310 nm; single mode 1310 nm、1550nm
- Fiber type: multi-mode 50/125um 、 62.5/125um 、 100/140um;single mode 8.3/125 um 、 9/125um 、 10/125um
- Transmission distance: multi-mode 2km, single mode 20km.
- Fiber interface type: ST/SC/FC (optional); ST (standard configuration).
- Single Fiber wavelength: A: Transmit wavelength is single mode 1310nm, then Receive wavelength is 1550nm; B: Transmit wavelength is single mode 1550nm, then Receive wavelength is 1310nm
- The optical line BER: <10^{-9}
- Signal Delay (optical interface): ≤20μs/node

Power
- DC (9~36V) dual redundant power input, industrial standard voltage DC24V, consumption is less than 4W, With DC1500V voltage isolation and reverse connect protection, adopt 5 cores 5.08mm industrial terminal port (please use industrial standard power, otherwise it will occur unit error or damage).

Protection
- Relay: optical fiber link failure and bus error alarm output
- Contact rating: 1A @24V DC, Industrial Terminal port

Mechanical
- Dimensions (H×D×W): 136mm×104.8mm×52.8mm
- Weight:800g
- Casing: IP40 protection, wave grain aluminum reinforce case option
- Installation: Wall mounting or DIN rail mounting

Environmental
- Operating Temperature:-40 ℃ ~75 ℃ (-40 ℃ ~85 ℃ optional)
- Storage Temperature: -40℃~85℃
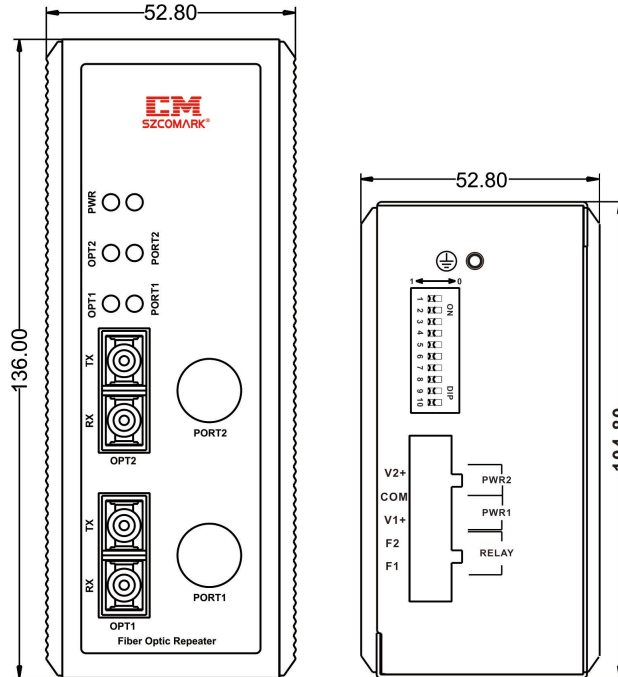- Ambient Relative Humidity: 5%~95%(non-condensing)

Warranty
- Warranty Period: 5 years

Certification

- IEC61000-4-2(ESD): Power ±4KV Contact, ±15KV Air; Relay ±2KV Contact, ±15KV Air; Data Cable ±15KV Air
- IEC61000-4-4(EFT):Power ±1KV, Data Cable ±1KV
- IEC61000-4-5(Surge):Power ± 2KV CM/ ± 1KV DM, Relay±2KV CM/ ±1KV DM
- IEC60068-2-27(Shock)
- IEC60068-2-32(Free Fall)
- IEC61000-6-2(General Industrial Standard)
- EN50121-4 (rail transit)

Dimensions（mm）

Models

Part No.	Product series	Description
Ci-RF11	1*copper,1*Fiber	S908 RIO fiber-ring optic repeater, 1.544M baud rate , S908 RIO field bus standard, F-Type interface, one electric port and one fiber port, 35mmDIN, Alert relay, MM/SM, ST/SC/FC optional.
Ci-RF12	1*copper,2*Fiber	S908 RIO fiber-ring optic repeater, 1.544M baud rate , S908 RIO field bus standard, F-Type interface, one electric port and two fiber port, 35mmDIN, Alert relay, MM/SM, ST/SC/FC optional.
Ci-RF21	2*copper,1*Fiber	S908 RIO fiber-ring optic repeater, 1.544M baud rate , S908 RIO field bus standard, F-Type interface, two electric port and one fiber port, 35mmDIN, Alert relay, MM/SM, ST/SC/FC optional.
Ci-RF22	2*copper,2*Fiber	S908 RIO fiber-ring optic repeater, 1.544M baud rate , S908 RIO field bus standard, F-Type interface, two electric port and two fiber port, 35mmDIN, Alert relay, MM/SM, ST/SC/FC optional.

Package List

- S908 RIO Optical Fiber Repeater (with industrial terminal block for power equipment)
- Product specification
- Product warranty card