Industrial Data Optical Transceiver

PH-TY series
RS422 bus data optical transceiver

Product overview

PH-TY series product is an industrial RS-422 data optical transceiver, which supports rate 0~6M (optional 0-10M) , RS422 data connector with 5PIN interface (DP9 interface is optional), single optical port/dual optical port chain network, it supports RS422 protocol. 35mmDIN, DC 9-30V power supply. PH-TYRS422222 supports two cascadable upstream and downstream optical fiber interfaces, one data interface, PH-TYRS422221 supports one optical fiber interface and one data interface.

Product features

- Support RS-422 industrial control fieldbus protocol and Rx-.Rx+ .Tx-Tx+ full duplex mode
- The longest communication distance of optical fiber can reach 60KM
- The electric interface has the isolation functions with 1500V voltage and 600W surge protection
- It adopts standard industrial 35mm DIN rail installation method
- Communication rate 0~6M with self-adaptation (0-10M optional)
- The interface adopts data connector with RS-4225 PIN, DB9 interface is optional
- It adopts DC9-30V wide power input, dual power redundancy, DC1000V power isolation and reverse connection protection, which meets the requirements of various industrial sites requirements. It can provide relay output optical fiber and power failure alarm

Electrical interface

- Support Rx-.Rx+ .Tx-Tx+ full duplex mode
- Communication rate 0~6M with self-adaptation (0-10M optional)
- Termination resistor: this product has no termination resistor, but it can be connected with an external resistor when needed.
- Compatible with 5PIN interface terminal of RS422 data connector
- Isolation voltage: instantaneous isolation voltage 5000V; continuous isolation voltage 1000V

Optical fiber interface

- Fiber wavelength: multimode: 850nm, 1310nm; singlemode: 1310nm, 1550nm
- optical fiber interface type: SC, ST and FC are optional; standard: SC interface
- Transmission optical fiber: multimode: 50/125, 62.5/125, 100/140um singlemode: 8.3/125, 9/125um, 10/125um
- Transmission distance: multimode 2KM; singlemode: 20KM

Other indicators

- Power supply: support dual power redundant input, DC9-30V, typical DC24V, power consumption less than 1.5W
- Maximum capacity: DC48V/1A, industrial terminal interface
- Relative humidity: ⩽90% (no condensation); storage temperature: -40~80°C
- Optical fiber link failure and power failure alarm relay output; contact
- Dimensions: 136mm×105mm×52mm
- Working temperature: -10-70°C(-40~+85°C optional)

Industrial Data Optical Transceiver

PH-Co series
RS422 ControlNet
bus data optical transceiver

Product overview

PH-Co series product is an industrial ControlNet data optical transceiver, which supports rate 5Mbps, standard BNC connector compatible with ControlNet data interface, support single optical port/dual optical port chain network and ControlNet protocol. 35mmDIN, DC 9-30V power supply. PH-Co supports two cascadable upstream and downstream optical fiber interfaces, one data interface, ZD-Co supports one optical fiber interface and one data interface.

Product features

- Support ControlNet industrial control fieldbus protocol
- The longest communication distance of optical fiber can reach 60KM
- The electric interface has the isolation functions with 1500V voltage and 600W surge protection
- It adopts standard industrial 35mm DIN rail installation method
- Communication rate 5Mbps
- The interface uses standard BNC interface, which is compatible with ControlNet data connectors, convenient for field wiring
- It adopts DC9-30V wide power input, dual power redundancy, DC1000V power isolation and reverse connection protection, which meets the requirements of various industrial sites requirements. It can provide relay output optical fiber and power failure alarm

Electrical interface

- Support ControlNet protocol
- Compatible with ControlNet data interface with standard BNC connector
- Communication rate 5Mbps
- Isolation voltage: with 1500V isolation voltage and 600W surge protection function

Optical fiber interface

- Fiber wavelength: multimode: 850nm, 1310nm; singlemode: 1310nm, 1550nm
- optical fiber interface type: SC, ST and FC are optional; standard: SC interface
- Transmission optical fiber: multimode: 50/125, 62.5/125, 100/140um singlemode: 8.3/125, 9/125um, 10/125um
- Transmission distance: multimode 2KM; singlemode: 20KM

Other indicators

- Power supply: support dual power redundant input, DC9-30V, typical DC24V, power consumption less than 1.5W
- Dimensions: 136mm×105mm×52mm
- Relative humidity: ⩽90% (no condensation); storage temperature: -40~80°C
- Optical fiber link failure and power failure alarm relay output; contact maximum capacity: DC48V/1A, industrial terminal interface
- Working temperature: -10-70°C(-40~+85°C optional)

Industrial Data Optical Transceiver

PH-D series
DeviceNet bus data optical transceiver

Product overview

PH-D series product is an industrial DeviceNet data optical transceiver, which supports maximal rate 500K, DeviceNet single optical port/dual optical port chain network . 35mmDIN, DC 9-30V power supply. PH-D supports two cascadable upstream and downstream optical fiber interfaces, one data interface, PH-D supports one optical fiber interface and one data interface.

Product features

- Support DeviceNet industrial control fieldbus protocol
- The electric interface has the isolation functions with 1500V voltage and 600W surge protection
- It adopts standard industrial 35mm DIN rail installation method
- Communication rate 0-500K self-adaptation
- It adopts DC9-30V wide power input, dual power redundancy, DC1000V power isolation and reverse connection protection, which meets the requirements of various industrial sites requirements. It can provide relay output optical fiber and power failure alarm

Electrical interface

- Support DeviceNet protocol
- Maximal communication rate 500K
- 5PIN interface terminal
- Isolation voltage: with 1500V isolation voltage and 600W surge protection function

Optical fiber interface

- Fiber wavelength: multimode: 850nm, 1310nm; singlemode: 1310nm, 1550nm
- Optical fiber interface type: SC, ST and FC are optional; standard: SC interface
- Transmission optical fiber: multimode: 50/125, 62.5/125, 100/140um singlemode: 8.3/125, 9/125um, 10/125um
- Transmission distance: multimode 2KM; singlemode: 10-60KM

Other indicators

- Power supply: support dual power redundant input, DC9-30V, typical DC24V, power consumption less than 1.5W
- Dimensions: 136mm×105mm×52mm
- Relative humidity: ⩽90% (no condensation)
- Optical fiber link failure and power failure alarm relay output; contact maximum capacity: DC48V/1A, industrial terminal interface
- Working temperature: -10-70°C(-40~+85°C optional)
- Storage temperature: -40~80°C

Industrial Data Optical Transceiver

PH-M series
Mod bus data optical transceiver

Product overview

The PH-M series product is an industrial Modbus data optical transceiver, supports Modbus protocol, communication rate is 0-230. 4K, single optical port / dual optical port chain network with IP30 protection grade, wavy aluminum reinforced enclosure mounted on 35mm DIN rail, DC (9-30) V power supply with relay alarm output, redundant power supply and isolation protection function. PH-M221 supports one optical fiber interface, one data interface, PH-M222 supports two cascadable uplink and downlink optical fiber interfaces, and one data interface.

Product features

- Support Mod bus industrial control protocol
- The longest optical fiber communication distance can reach 60KM
- The electric interface has the isolation functions with 1500V voltage and 600W surge protection
- It adopts standard industrial 35mm rail installation method
- Communication rate 0-230.4K
- Support single optical port/dual optical port chain network
- It adopts DC9-30V wide power input, dual power redundancy, DC1000V power isolation and reverse connection protection, which meets the requirements of various industrial sites requirements. It can provide relay output optical fiber and power failure alarm

Electrical interface

- Compatible with Modbus RS485 5PIN industrial terminal
- Isolation voltage: instantaneous isolation voltage 5000V; continous is olation voltage 1000V
- Support Modbus field bus protocol, communication rate 0~230. 4K
- Termination resistor: This product does not have a termination resistor, but it can be connected with it externally when needed

Optical fiber interface

- Fiber wavelength: multimode: 850nm, 1310nm; singlemode: 1310nm, 1550nm
- Optical fiber interface type: SC, ST and FC are optional; standard: SC interface
- Transmission optical fiber: multimode: 50/125, 62.5/125, 100/140um singlemode: 8.3/125, 9/125um, 10/125um
- Transmission distance: multimode 2KM; singlemode: 20KM

Other indicators

- Power supply: support dual power redundant input, DC9-30V, typical DC24V, power consumption less than 1.5W
- Dimensions: 136mm×105mm×52mm
- Relative humidity: ⩽90% (no condensation)
- Optical fiber link failure and power failure alarm relay output; contact maximum capacity: DC48V/1A, industrial terminal interface
- Working temperature: -10-70°C(-40~+85°C optional)
- Storage temperature: -40~80°C

Industrial Data Optical Transceiver

PH-P series
Profibus-DP
bus data optical transceiver

Product overview

The PH-P series product is an industrial Profibus-DP data optical transceiver, communication rate is 0-6M (~12M is optional) with self-adaptation, DB9 interface compatible with Profibus-DP data connector, meantime it supports the industrial terminal wiring, single optical port/dual optical port chain network support, support Profibus-DP protocol. Mounted on 35mm DIN rail, DC 9-30 V power supply. PH-P221 supports one optical fiber interface, one data interface, PH-P222 supports two cascadable uplink and downlink optical fiber interfaces, and one data interface.

Product features

- Support Profibus-DP industrial control protocol, communication rate 0-6M self-adaptation
- The electric interface has the isolation functions with 1500V voltage and 600W surge protection
- It adopts standard industrial 35mm rail installation method
- The longest optical fiber communication distance can reach 60KM
- The interface adopts the DB9 interface which is compatible with Profibus-DP data interface
- It adopts DC9-30V wide power input, dual power redundancy, DC1000V power isolation and reverse connection protection, which meets the requirements of various industrial sites requirements. It can provide relay output optical fiber and power failure alarm

Electrical interface

- Profibus-DP A, B half-duplex operating mode
- Communication rate 0-6M self-adaptation
- Termination resistor: This product does not have a termination resistor, but it can be connected with it externally when needed
- DB9 which is compatible with Profibus-DP data connector
- Isolation voltage: instantaneous isolation voltage 5000V; continous isolation voltage 1000V

Optical fiber interface

- Fiber wavelength: multimode: 850nm, 1310nm; singlemode: 1310nm, 1550nm
- optical fiber interface type: SC, ST and FC are optional; standard: SC interface
- Transmission optical fiber: multimode: 50/125, 62.5/125, 100/140um singlemode: 8.3/125, 9/125um, 10/125um
- Transmission distance: multimode 2KM; singlemode: 20KM

Other indicators

- Power supply: support dual power redundant input, DC9-30V, typical DC24V, power consumption less than 1.5W
- Dimensions: 136mm×105mm×52mm
- Relative humidity: ⩽90% (no condensation)
- Optical fiber link failure and power failure alarm relay output; contact maximum capacity: DC48V/1A, industrial terminal interface
- Working temperature: -10-70°C(-40~+85°C optional)
- Storage temperature: -40~80°C

Industrial Data Optical Transceiver

PH-TY series
RS232 bus data optical transceiver

Product overview

PH-TY series product is an industrial RS-232 data optical transceiver, which supports rate 0-115. 2M, DP9 interface is compatible with RS-232 data connector, meantime it supports industrial termination wiring, single optical port/dual optical port chain network, it supports RS232 protocol. 35mmDIN, DC 9-30V power supply.
PH-TYRS232222 supports two cascadable upstream and downstream optical fiber interfaces, one data interface, PH-TYRS232221 supports one optical fiber interface and one data interface.

Product features

- Support RS-232 industrial control fieldbus protocol and communication rate 0-115. 2M with self-adaptation
- The interface adopts DB9 interface which is compatible with RS-232 data connector
- It adopts DC9-30V power input, dual power redundancy, DC1000V power isolation and reverse connection protection, which meets the requirements of various industrial sites requirements. It can provide relay output optical fiber and power failure alarm
- The longest communication distance of optical fiber can reach 60KM
- The electric interface has the isolation functions with 1500V voltage and 600W surge protection
- It adopts standard industrial 35mm DIN rail installation method

Electrical interface

- Support RxD. TxD, GND three-wire operating mode
- Communication rate 0-115. 2M with self-adaptation
- Termination resistor: this product has no termination resistor, but it can be connected with an external resistor when needed
- DB9 which is compatible with RS232 data connector
- Isolation voltage: instantaneous isolation voltage 5000V; continuous isolation voltage 1000V

Optical fiber interface

- Fiber wavelength: multimode: 850nm, 1310nm; singlemode: 1310nm, 1550nm
- optical fiber interface type: SC, ST and FC are optional; standard: SC interface
- Transmission optical fiber: multimode: 50/125, 62.5/125, 100/140um singlemode: 8.3/125, 9/125um, 10/125um
- Transmission distance: multimode 2KM; singlemode: 20KM

Other indicators

- Power supply: support dual power redundant input, DC9-30V, typical DC24V, power consumption less than 1.5W
- Contact maximum capacity: DC48V/1A, industrial terminal interface
- Working temperature: -10-70°C(-40~+85°C optional)
- Optical fiber link failure and power failure alarm relay output
- Dimensions: 136mm×105mm×52mm
- Relative humidity: ⩽90% (no condensation); storage temperature: -40~80°C

Industrial Data Optical Transceiver

PH-C series
CAN bus data optical transceiver

Product overview

PH-C series product is an industrial CAN data optical transceiver, which supports CAN2.0A/B protocol, communication rate 500K with single optical port/dual optical port chain network. Protection level is IP30, with wavy aluminum reinforced enclosure mounted on 35mm DIN rail, DC (9-30) V power supply with relay alarm output, redundant power supply and isolation protection function. PH-C2221 supports one optical fiber interface, one data interface, PH-C2222 supports two cascadable uplink and downlink optical fiber interfaces, and one data interface.

Product features

- Support CAN2.0A/B industrial control fieldbus protocol
- Single optical port / dual optical port chain network support
- The electric interface has the isolation functions with 1500V voltage and 600W surge protection
- It adopts standard industrial 35mm guide rail installation method
- Communication rate 0-500K self-adaptation
- CAN2. OA/B field bus 5PIN industrial terminal wiring
- It adopts DC9-30V wide power input, dual power redundancy, DC1000V power isolation and reverse connection protection, which meets the requirements of various industrial sites requirements. It can provide relay output optical fiber and power failure alarm

Electrical interface

- CAN2. 0A/B field bus
- Support: 500K
- 5PIN interface terminal
- Isolation voltage: instantaneous isolation voltage 5000V; continuous isolation voltage 1000V

Optical fiber interface

- Fiber wavelength: multimode: 850nm, 1310nm; singlemode: 1310nm, 1550nm
- optical fiber interface type: SC, ST and FC are optional; standard: SC interface
- Transmission optical fiber: multimode: 50/125, 62.5/125, 100/140um singlemode: 8.3/125, 9/125um, 10/125um
- Transmission distance: multimode 2KM; singlemode: 20KM

Other indicators

- Power supply: support dual power redundant input, DC9-30V, typical DC24V, power consumption less than 1.5W
- Contact maximum capacity: DC48V/1A, industrial terminal interface
- Working temperature: -10-70°C(-40~+85°C optional)
- Optical fiber link failure and power failure alarm relay output
- Dimensions: 125mmX90mm(with clamp rail 100mm) X 50mm
- Relative humidity: ⩽90% (no condensation); storage temperature: -40~80°C

Industrial Data Optical Transceiver

PH-G series
GE Genius bus data optical transceiver

Product overview

PH-G series product is an industrial GE Genius data optical transceiver, communication rate is 153.6K, industrial terminal interface with single optical port/dual optical port chain network. Mounted on 35mm DIN rail, DC 9-30V power supply. PH-G221 supports one optical fiber interface, one data interface, PH-G222 supports two cascadable uplink and downlink optical fiber interfaces, and one data interface.

Product features

- Support GE Genius industrial control fieldbus protocol
- The longest optical fiber communication distance can reach 60KM
- The electric interface has isolation function with 600W surge protection and overload protection function
- It adopts standard industrial 35mm DIN rail installation method
- Communication rate 153.6K
- The interface adopts industrial terminal interface, which provides convenience for field wiring
- It adopts DC9-30V wide power input, dual power redundancy, DC1000V power isolation and reverse connection protection, which meets the requirements of various industrial sites requirements. It can provide relay output optical fiber and power failure alarm

Electrical interface

- Support GE Genius SERI, SER2 industrial termination wiring
- It has isolation functions with 1500V voltage and 600W surge protection
- Communication rate: 153. 6K

Optical fiber interface

- Fiber wavelength: multimode: 850nm, 1310nm; singlemode: 1310nm, 1550nm
- optical fiber interface type: SC, ST and FC are optional; standard: SC interface
- Transmission optical fiber: multimode: 50/125, 62.5/125, 100/140um singlemode: 8.3/125, 9/125um, 10/125um
- Transmission distance: multimode 2KM; singlemode: 20KM

Other indicators

- Power supply: support dual power redundant input, DC9-30V, typical DC24V, power consumption less than 1.5W
- Contact maximum capacity: DC48V/1A, industrial terminal interface
- Working temperature: -10-70°C(-40~+85°C optional)
- Optical fiber link failure and power failure alarm relay output
- Dimensions: 136mmX 105mmX 52mm
- Relative humidity: ⩽90% (no condensation)
- Storage temperature: -40~80°C

Industrial Data Optical Transceiver

PH-TY series
RS485 bus data optical transceiver

Product overview

The PH-TY series product is an industrial RS-485 data optical transceiver, supports A - B RS - 485 protocol, communication rate is 0 - 6M (0 - 10M optional), single optical port / dual optical port chain network with IP30 protection grade, wavy aluminum reinforced enclosure mounted on 35mm DIN rail, DC (9-30) V power supply with relay alarm output, redundant power supply and isolation protection function. PH-TY supports one optical fiber interface, one data interface, PH-TY supports two cascadable uplink and downlink optical fiber interfaces, and one data interface.

Product features

- Support A - B RS - 485 industrial control protocol, communication rate supports 0-6M (0-10M is optional)
- The electric interface has the isolation functions with 1500V voltage and 600W surge protection
- It adopts DC9-30V wide power input, dual power redundancy, DC1000V power isolation and reverse connection protection, which meets the requirements of various industrial sites requirements
- Support single optical port/dual optical port chain network
- A-B DH-485 field bus 5PIN industrial terminal wiring (optional DP9 port)
- It can provide relay output optical fiber and power failure alarm.
- It adopts standard industrial 35mm rail installation method

Electrical interface

- A - B RS - 485 field bus
- Support rate 0-6M (0 - 10M optional)
- 5PIN industrial terminal connection (DP9 interface is optional)
- Isolation voltage: instantaneous isolation voltage 5000V; continuous isolation voltage 1000V

Optical fiber interface

- Fiber wavelength: multimode: 850nm, 1310nm; singlemode: 1310nm, 1550nm
- Optical fiber interface type: SC, ST and FC are optional; standard: SC interface.
- Transmission optical fiber: multimode: 50/125, 62.5/125, 100/140um singlemode: 8.3/125, 9/125um, 10/125um
- Transmission distance: multimode 2KM; singlemode: 20KM, Longer distance optional

Other indicators

- Power supply: support dual power redundant input, DC9-30V, typical DC24V, power consumption less than 1.5W
- Contact maximum capacity: DC48V/1A, industrial terminal interface
- Working temperature: -10-70°C(-40~+85°C optional)
- Optical fiber link failure and power failure alarm relay output
- Dimensions: 125mm×90mm(with card rail 100mm)×50mm
- Relative humidity: ⩽90% (no condensation)
- Storage temperature: -40~80°C

Industrial Data Optical Transceiver

PH-S series
S908 RIO bus optical transceiver

Product overview

PH-S series product is an industrial S908 RIO data optical transceiver, which supports 1. 544Mbps protocol with standard F head with coaxial interface compatible with S908 data connector. Single optical port / dual optical port chain network support, 35mm DIN rail, DC 9-30V power supply , Suppoyt S908 RIO bus protocol. PH-S221 supports one optical fiber interface, one data interface, PH-S222 supports two cascadable uplink and downlink optical fiber interfaces, and one data interface.

Product features

- Support S908 RIO industrial control fieldbus protocol.The communication rate is 1.544M adaptive
- The interface adopts standard BNC-F head coaxial interface, compatible with S908 data interface
- It adopts DC9-30V wide power input, dual power redundancy, DC1000V power isolation and reverse connection protection, which meets the requirements of various industrial sites requirements. It can provide relay output optical fiber and power failure alarm
- The longest optical fiber communication distance can reach 60KM
- The electric interface has the isolation functions with 1500V voltage and 600W surge protection
- It adopts standard industrial 35mm DIN rail installation method

Electrical interface

- Support S908 RIO bus protocol
- Communication rate 1. 544 Mbps
- Termination resistor: This product is without termination resistor, but it can be connected with it when needed
- Standard F-head coaxial interface compatible with S908 data connector
- Isolation voltage: with 1500V isolation voltage and 600W surge protection function

Optical fiber interface

- Fiber wavelength: multimode: 850nm, 1310nm; singlemode: 1310nm, 1550nm
- Optical fiber interface type: SC, ST and FC are optional; standard: SC interface.
- Transmission optical fiber: multimode: 50/125, 62.5/125, 100/140um singlemode: 8.3/125, 9/125um, 10/125um
- Transmission distance: multimode 2KM; singlemode: 20KM

Other indicators

- Power supply: support dual power redundant input, DC9-30V, typical DC24V, power consumption less than 1.5W
- Contact maximum capacity: DC48V/1A, industrial terminal interface
- Working temperature: -10-70°C(-40~+85°C optional)
- Optical fiber link failure and power failure alarm relay output
- Dimensions: 136mmX 105mmX 52mm
- Relative humidity: ⩽90% (no condensation)
- Storage temperature: -40~80°C