

SG-CG-P4

Communication Modules



Sygole SG—CG— P4 communication modules are standard industrial bus protocol controller.we can provide versions that support bus protocols such as ProfiNet/EtherCAT/EtherNet/IP/DeviceNet. The communication module consists of two 7/8" power supply interfaces, two M12 5PIN bus interfaces, four M12 RFID reader interfaces and four M12 4PIN I/O interfaces: (including eight I/O interfaces). The transmission rate is up to 100Mbps, and multiple controllers can be cascaded to the PLC to provide powerful field data acquisition and I/O control.The housing is made of Lightweight, sturdy epoxy.They have the characteristics of wide connection range, strong communication ability, good environment adaptability and high protection level.



Functions

- Support ProfiNet/EtherCAT/EtherNet/IP/DeviceNet/ProfibusDP protocol.
- Connect 4 RFID readers, control multiple cascaded devices at the same time, realise industrial networking directly with PLC numerical control system and host computer.

Performance

- Can connect up to 8 IO devices, with a maximum of 100 meters of communication to meet different monitoring requirements of various application environments.
- IP67 protection level can adapt to harsh environments such as oil (cutting fluid, etc.), dust, moisture, etc.
- The connector has an error proof insert design to ensure reliability in the industrial field.
- 7"24 continuous work, industrial level stability and high temperature resistance in the harsh environment.

Applications

Engine/component assembly line

SG—CG—P4 communication modules can connect RFID readers and other IO devices. By identifying the RFID tags on the components (pallets), the processing information is transmitted to the host computer control system in real time, enabling automatic control of part identification, process identification, and production cycle control to ensure correct assembly and improve assembly efficiency and quality.

Production line

SG—CG—P4 communication modules are maturely used in 3C electronics, automotive and other production lines, through the connection with RFID readers and other IO equipment, to ensure real—time transmission of information between the production line and control system to help achieve mixed flow production ,greatly improve the efficiency of the production line.

Automation equipment, machine tools

SG—CG—P4 communication modules can be used in machine tools and automation equipment. They can communicate with 4 channels of RFID readers at the same time and control up to 8 channels of IO, which are convenient for on-site collection of relevant data and control. The communication modules connects the machine and automation equipment via the fieldbus, passes the information to the management system to interconnect the devices, and provides information support for the automation control.

SG-CG-P4 Specifications

| Technical Data | | | | |
|--------------------------|----------------------------|--|----------------------------|-------------------------|
| Physical Characteristics | SG-CG-P4-EN | SG-CG-P4-ECT | SG-CG-P4-EIP | SG-CG-P4-PN |
| Specifications | Supply Voltage | 18 - 30 VDC | | |
| | Supply Current | 0.8A | | |
| | Power Supply Mode | Vertical Dual Power Supply (System power supply UB, load power supply UL) | | |
| | Power Connector | 7/8 male / female 5Pin | | |
| | Power Protection | Reverse polarity protection / 1500W surge protection | | |
| Communication | Protocol | Ethernet TCP/IP | EtherCAT | EtherNet IP Profinet |
| | Network Interface | Dual network ports are integrated with switch function and comply with IEEE802.3 STD | | |
| | Connection topology | Star Connection | | |
| | Communication cable length | 100 Meters | | |
| I/O Port | Communication Interface | M12 D code Female | | |
| | I/O | 8 GPIO | | |
| | Frequency | 250Hz | | |
| | Current | Switching output current MAX 0.7A per channel | | |
| | I/O Interface | 2 x M12 A code 5Pins - PNP | 4 x M12 A code 5Pins - PNP | |
| RFID Devices Port | Circuit Protection | Surge protection on Inputs / Short Circuit protection on Outputs | | |
| Enviroments | RFID Interfaces | 2 RFID Devices | 4 RFID Devices | |
| | Operating Temperature | -25°C +75°C | | |
| | Storage Temperature | -40°C +85°C | | |
| | Working Humidity | 5/95% non condensing | | |
| | IP Protection Grade | IP67 | | |
| | Corrosion resistant Gas | IEC 60068-2-42/43 | | |
| | Vibration | EN61131 | | |
| | Certifications | CE - FCC - EN61131-2 / EN50082-2 | | |

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