# CIB – for connection of security and access detectors

| Type | DI | DO | AI | AO | Comm |
|---|---|---|---|---|---|
| **C-WG-0503S** | 3 DI (TTL) | 3 × DO (NPN) | 2 AI/DI | | Wiegand, CIB |

## Basic features

- Universal module with combination of inputs, outputs, Wiegand communication line and integrated 12V DC power supply. This combination is suitable for connection of security, fire and access detectors on CIB bus in projects where security system does not need be certified.
- Inputs IN1-IN3 on TTL level allows to connect connection external device via Wiegand interface to enable integrate the RFID card readers, security keyboard and similar devices via CIB.
- Inputs IN1-IN3 can be used as digital inputs on TTL level as alternative
- Module is equipped by two universal inputs IN4, IN5, that allow to connect standard security detectors with relay outputs via simply or double balanced loops.
- Module has integrated power supply 12V DC to supply detectors and other devices usually designed for that voltage.
- Module is further equipped by semiconductor outputs (NPN with open collector), which may be used as free programmable actuators according your opinion. For example for LED signaling, switch on the buzzer or opening door by external relay.

- Module is in miniature built-in design. In extreme cases may be built-in into detectors of security systems.
- Operation of module is indicated by LED diode.

## Connection

- Module is connected by two stranded wires to CIB, which provides both communication and power supply of the module.
- Detectors, readers with Wiegand interface and other devices are connected by wires available on connector, which is inserted into module.

## Use

- Sensing of standard or special detectors like PIR motion detectors, detectors of smoke, glass break etc.
- Connection of device communicating via Wiegand protocol.

### Connection example
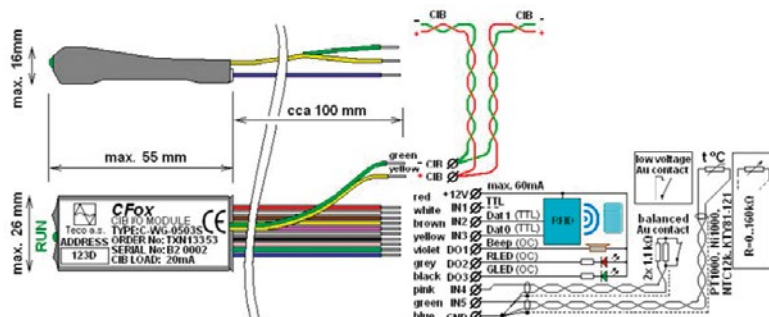


### Analog/combined inputs

| | |
|---|---|
| **Number of digital inputs** | 3 × DI (IN1–IN3), TTL 5 V<br>3.9 kΩ pull up resistor |
| **Number of universal inputs** | 2 × AI/DI (IN4–IN5) |
| **Galvanic isolation** | No |

| Sensor type | Range | Basic accuracy |
|---|---|---|
| Potential-free contact | 0/1 | 0 for >1.5 kΩ<br>1 if <0.5 kΩ |
| Balanced input | broken wire /0/1/tamper | for 2 × 1k1 balancing resistance |
| Pt1000 | −90 .. 320°C | 0.5% |
| Ni1000 | −60 .. 200°C | 0.5% |
| NTC 12k | −40 .. 125°C | 0.5% |
| KTY81-121 | −55 .. 125°C | 0.5% |
| Resistance | 0 – 160 kΩ | 0.5% |

### Operating conditions

| | |
|---|---|
| **Operating temperature** | 0 .. +70 °C |
| **Storage temperature** | −25 .. +85 °C |
| **Electric strength** | according EN 60730 |
| **IP Degree of protection (IEC 529)** | IP10B |
| **Overvoltage category** | II |
| **Degree of pollution IEC EN60664-1:2008** | 1 |
| **Working position** | any |
| **Installation** | into installation box, under device cover |
| **Connection of CIB, inputs, outputs** | Wires 0.5mm². grouped on connector inserted into module |

### Binary outputs

| | |
|---|---|
| **Number of outputs** | 3 × NPN, open collector |
| **Galvanic isolation** | No |
| **Polarity of LED connection** | Common anode |
| **Max voltage:** | 30 V |
| **Max. output switched current** | 30 mA |

### Communication

| | |
|---|---|
| **Installation bus** | CIB |
| **Communication with reader, keyboard** | Type of protocol: Wiegand<br>Format: 26 bits, 34 bits, 42 bits, 40 bits transparent<br>Number of bytes: 5, 4, 3, 5 |

### Power supply output 12 VDC

| | |
|---|---|
| **Output voltage** | 12 V DC |
| **Output current (max.)** | 60 mA |

### Dimensions and weight

| | |
|---|---|
| **Dimensions** | 55 × 26 × 16 mm |
| **Weight** | 7 g |

### Power supply

| | |
|---|---|
| **Power supply** | 24 V (27 V) from CIB |
| **Max. load** | 85 mA |
| **Typ./Max. input power** | 0.5 W/2.3 W |
| **Internal protection** | No |

### Order number

| TXN 133 53 | C-WG-0503S, CIB, 2 × AI/DI balanced, 3 × DO (NPN), 1 × Wiegand/3 × DI(TTL); output 12 V DC, connection of security system sensors |
|---|---|

C-WG-0503S

**Example of devices connectable to module C-WG-0503S**



RFID readers SAMSUNG SSA R1000, SSA R1100 and reader with keyboard SSA R2000



RFID readers Aktion AXR-100, AXR-200, AXR-300



PIR detectors Texecom Security systems



Fire detectors Texecom Fire alam systems

TECO Advanced Automation