https://www.wago.com/852-103



This unmanaged industrial ETHERNET switch (852-103) has eight Fast ETHERNET ports and 2 SFP slots (100BASE modules) for easily setting up smallto medium-sized networks. Its slim design paired with a DIN-rail adapter simplifies installation in the control cabinet and provides high vibration and shock resistance. Additionally, automatic transmission rate detection (auto-negotiation) and automatic identification of the transmit and receive lines (Auto MDI-X) allow simple plug-and-play operation, saving time and money during commissioning.

Status LEDs, a redundant power supply and an alarm contact (configurable via DIP switch) increase the switch's redundancy and diagnostic capabilities, providing higher operational uptime.

## Features:

- Redundant DC power supply
- Large supply voltage range: 9 ... 48 V
- DIP switch to set alarm functions
- Full compliance with IEEE802.3, 802.3u standards
- Non-blocking, store-and-forward switching
- Autonegotiation at all 10/100Base TX ports
- Auto-MDI/MDIX (crossover) at all 10/100BASE-TX ports

| Technical data |  |
| :---: | :---: |
| Switching mode | Store-and-forward; non-blocking |
| Number of $100 \mathrm{Mbit} / \mathrm{s}$ ports | 8 |
| Number of $100 \mathrm{Mbit} / \mathrm{s}$ SFP ports | 2 |
| Communication standards | IEEE 802.3 10BASE-T <br> IEEE 802.3u 100BASE-TX/FX IEEE 802.3x Flow Control |
| Redundancy function | Redundant DC power supply |
| Configuration options | DIP switch for signal contact |
| Diagnostics | Signal contact |
| MAC table (size) | 2000 addresses |
| Jumbo frame size | 1536 bytes |
| Supply voltage | $9 . . .48 \mathrm{VDC} ;$ Cable length: $<3 \mathrm{~m}$ |
| Power consumption (max.) | 6.08 W |
| Power consumption (typ.) (24 V) | 5.76 W |
| ESD (contact/air discharge) | $8 \mathrm{KV} / 15 \mathrm{KV}$ |
| Baud rate | Copper cable: 10/100 Mbit/s; Fiber optic:100 Mbit/s |
| Transmission medium (communication/fieldbus) | Copper cable: Cat. 5 or higher, 100 m maximum cable length; Fiber optic: FX Multi-Mode, LX Single-Mode |
| Optical fiber type | Single-mode and multi-mode |
| Packet throughput | $148800 \mathrm{pkt} / \mathrm{s}$ |
| Controls | $12 \times$ DIP switch: Alarm function power supplies and ports $1 . . .10$ |

## Data Sheet | Item Number: 852-103

https://www.wago.com/852-103
Technical data

| Indicators | Device: LED (PWR, RPS) green: Power supply (primary), redundant power supply (secon- <br> dary); LED (ALM) red: Alarm; LED (LNK/ACT, 100) green, LED (OFFLINE) red: Status fiber <br> optic ports; per port: LED (100, LNK/ACT) green: Status 100 Mbps, LNK/ACT ports $1 \ldots 8$ |
| :--- | :--- |
| Connection data | Copper cable: $8 \times$ RJ-45; Fiber optic: $2 \times$ SFP-slots (e.g., with SFP module and LC fiber- <br> optic connector) |
| Connection technology: communication/fieldbus | $1 \times$ Built-in male connector: 231-436/001-000; included female connector (MCS <br> Connectors): $231-106 / 026-000$ |
| Connection technology: supply |  |


| Physical data | $50 \mathrm{~mm} / 1.969$ inches |
| :--- | :--- |
| Width | $162 \mathrm{~mm} / 6.378$ inches |
| Height | $120 \mathrm{~mm} / 4.724$ inches |
| Depth |  |


| Mechanical data |  |
| :--- | :--- |
| Weight | 922 g |
| Color | black |
| Housing material | Aluminum |
| Conformity marking | CE |

## Environmental requirements

Ambient temperature (operation)
$-40 \ldots+70^{\circ} \mathrm{C}$ (UL max. $+60^{\circ} \mathrm{C}$ )
Ambient temperature (storage)
$-40 \ldots+85^{\circ} \mathrm{C}$
Protection type IP30
Relative humidity (without condensation) $95 \%$
Mounting type DIN-35 rail
Vibration resistance per IEC 60068-2-6
Shock resistance per IEC 60068-2-27
EMC immunity to interference
per EN 61000-6-2
EMC emission of interference
per EN 61000-6-4
Fire load
0 MJ

| Commercial data |  |
| :--- | :--- |
| Product Group | 27 (special components I/O) |
| eCl@ss 10.0 | $19-17-01-30$ |
| eCl@ss 9.0 | $19-17-01-06$ |
| ETIM 8.0 | EC000734 |
| ETIM 7.0 | EC000734 |
| PU (SPU) | 1 pcs |
| Packaging type | Box |
| Country of origin | TW |
| GTIN | 4045454665951 |
| Customs tariff number | 85176200000 |

