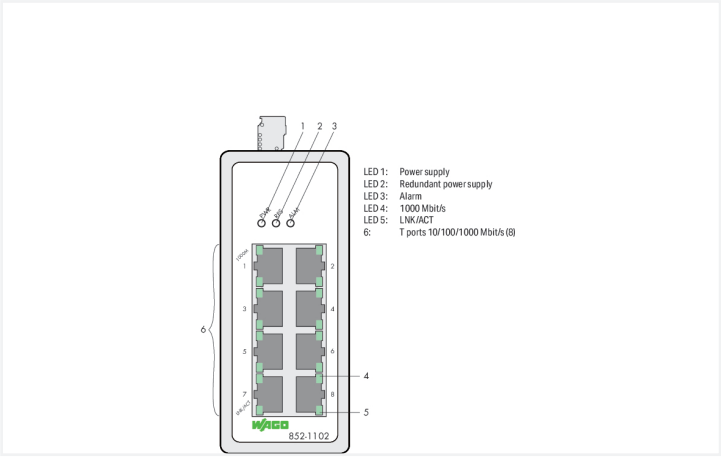
# Data Sheet | Item Number: 852-1102

Industrial-Switch; 8 Ports 1000Base-T; black

https://www.wago.com/852-1102






Color: ■ black

This unmanaged industrial ETHERNET switch (852-1102) has 8 Gigabit ETHERNET ports for easily setting up small- to 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 … 57 V
- DIP switch to set alarm functions
- Full compliance with IEEE 802.3, 802.3u and 802.3ab standards
- Non-blocking, store-and-forward switching
- Auto-negotiation at all 10/100/1000BASE-T ports
- Auto-MDI/MDIX (crossover) at all 10/100/1000BASE-T ports
- Integrated address look-up table, supports up to 8000 absolute MAC addresses
- Overvoltage protection
- Prioritization of ETHERNET data packets (PROFINET protocol, EtherType=0x8892) per IEEE802.1p

## Technical data

| | |
|---|---|
| Switching mode | Store-and-forward; non-blocking |
| Number of 1 Gb/s ports | 8 |
| Communication standards | IEEE 802.3 10BASE-T<br>IEEE 802.3u 100BASE-TX<br>IEEE 802.3ab 1000BASE-T<br>IEEE 802.3x Flow Control<br>IEEE 802.3az Energy Efficient Ethernet<br>IEEE 802.1p Prioritization<br>PROFINET Conformance Class A (CC-A) |
| Redundancy function | Redundant DC power supply |
| Configuration options | DIP switch for signal contact |
| Diagnostics | Signal contact<br>Alarm contact; Alarm relay; NO; 1 A at 24 VDC |
| MAC table (size) | 8000 addresses |
| Jumbo frame size | 9000 bytes |
| Supply voltage | 9 … 57 VDC; CE, UL; 24 VDC (DNV GL); 12, 24, 48 VDC (LR) |
| Power consumption (max.) | 6 W |

## Technical data

| | |
|---|---|
| Current consumption (max.) | 1000 mA |
| ESD (contact/air discharge) | 8 KV / 15 KV |
| Transmission rate | Copper cable: 10/1000 Mbit/s |
| Transmission medium (communication/fieldbus) | Copper cable: Cat. 5e or higher, 100 m maximum cable length |
| Topology | Star, tree and line topology |
| Control Elements | 10 x DIP switches: alarm function for supply voltages and ports 1 … 8 |
| Indicators | Device: LED (PWR, RPS) green: Power supply (primary), redundant power supply (secondary); LED (ALM) red: Alarm; per port: LED (1000, LNK/ACT) green: Status 1000 Mbps, LNK/ACT ports 1 … 8 |

## Connection Data

| | |
|---|---|
| Connection technology: communication/fieldbus | Copper cable: 8 x RJ-45 |
| Connection technology: supply | 1 x Built-in male connector: 231-436/001-000; included female connector (*MCS* Connectors): 2231-106/026-000 |

## Physical data

| | |
|---|---|
| Width | 50 mm / 1.969 inches |
| Height | 105 mm / 4.134 inches |
| Depth | 120 mm / 4.724 inches |

## Mechanical data

| | |
|---|---|
| Mounting type | DIN-35 rail |
| Mounting (note) | Compass safe distance: > 40 cm |

## Material data

| | |
|---|---|
| Color | black |
| Housing material | Aluminum |
| Fire load | 0.2 MJ |
| Weight | 543 g |
| Conformity marking | CE |

## Environmental requirements

| | |
|---|---|
| Ambient temperature (operation) | -40 … +70 °C |
| Ambient temperature (storage) | -40 … +80 °C |
| Protection type | IP30 |
| Note on protection type | Use per UL 61010: Indoor |
| Pollution degree | 2 per UL 61010 |
| Relative humidity (without condensation) | 95 % |
| 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 |


Continued on next page

## Commercial data

| | |
|---|---|
| PU (SPU) | 1 pcs |
| Packaging type | Box |
| Country of origin | TW |
| GTIN | 4055143500173 |
| Customs tariff number | 85176200000 |

## Product Classification

| | |
|---|---|
| UNSPSC | 43222612 |
| eCl@ss 10.0 | 19-17-01-30 |
| eCl@ss 9.0 | 19-17-01-06 |
| ETIM 9.0 | EC000734 |
| ETIM 10.0 | EC000734 |
| ECCN | NO US CLASSIFICATION |

## Environmental Product Compliance

| | |
|---|---|
| RoHS Compliance Status | Compliant,No Exemption |

## Approvals / Certificates

### General approvals

| Approval | Standard | Certificate Name |
|---|---|---|
| EAC<br>GZO Almaty Standart | TP TC 020/2011 | EAC CoC 03083 |
| KC<br>National Radio Research Agency | Article 58-2, Clause 3 | MSIP-REM-W43-ISW852 |
| UL<br>Underwriters Laboratories Inc. (ORDINARY LOCATIONS) | - | E175199 |

### Declarations of conformity and manufacturer's declarations

| Approval | Standard | Certificate Name |
|---|---|---|
| EU-Declaration of Conformity<br>WAGO GmbH & Co. KG | - | - |

### Approvals for marine applications

| Approval | Standard | Certificate Name |
|---|---|---|
| DNV<br>DNV GL SE | - | TAA00002YN |
| LR<br>Lloyds Register | - | LR2631713TA |


Continued on next page

## Downloads

### Environmental Product Compliance

**Compliance Search**

Environmental Product Compliance 852-1102

### Documentation

**Manual**

| | | | |
|---|---|---|---|
| Product Manual 8-Port 1000BASE-T Industrial Switch | V 1.3.0<br>15.04.2021 | pdf<br>1392.35 KB | |

**System Description**

| | | |
|---|---|---|
| Industrial Switches – General Product Information | pdf<br>1873.93 KB | |

**Bid Text**

| | | | |
|---|---|---|---|
| 852-1102 | 19.02.2019 | xml<br>4.92 KB | |
| 852-1102 | 09.05.2018 | docx<br>17.55 KB | |

### CAD/CAE-Data

**CAD data**

2D/3D Models 852-1102

**CAE data**

EPLAN Data Portal 852-1102

ZUKEN Portal 852-1102

## 1 Compatible Products

### 1.1 Optional Accessories

#### 1.1.1 Cables and connectors

##### 1.1.1.1 Connector plug



Item No.: 750-979/000-011
Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568A; AWG 22; Strain relief



Item No.: 750-979/000-021
Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568A; AWG 24; Strain relief



Item No.: 750-979/000-012
Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568B; AWG 22; Strain relief



Item No.: 750-979/000-022
Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568B; AWG 24; Strain relief



Item No.: 750-977/000-011
Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 22



Item No.: 750-978/000-011
Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 22; Strain relief



Item No.: 750-977/000-021
Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 24



Item No.: 750-978/000-021
Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 24; Strain relief



Item No.: 750-977/000-012
Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 22



Item No.: 750-978/000-012
Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 22; Strain relief



Item No.: 750-977/000-022
Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 24



Item No.: 750-978/000-022
Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 24; Strain relief



Item No.: 750-979/000-013
Connector PROFINET; RJ-45; Cat. 6A; angled; AWG 22; Strain relief



Item No.: 750-977/000-013
Connector PROFINET; RJ-45; Cat. 6A; straight; AWG 22



Item No.: 750-978/000-013
Connector PROFINET; RJ-45; Cat. 6A; straight; AWG 22; Strain relief



Item No.: 750-976
PROFINET RJ-45 connector, IP20; ETHERNET 10/100 Mbit/s; for field assembly


Continued on next page

## 1.1.2 Interface module

### 1.1.2.1 Interface module



Item No.: 289-195
Interface module; RJ-45; IDC technology; Cat. 6; in mounting carrier; with shield connection

## 1.1.3 Power supply

### 1.1.3.1 Power Supply



Item No.: 787-1602
Switched-mode power supply; Classic; 1-phase; 24 VDC output voltage; 1 A output current; NEC Class 2; DC OK signal



Item No.: 787-1632
Switched-mode power supply; Classic; 1-phase; 24 VDC output voltage; 10 A output current; TopBoost; DC OK contact



Item No.: 787-1606
Switched-mode power supply; Classic; 1-phase; 24 VDC output voltage; 2 A output current; NEC Class 2; DC OK signal



Item No.: 787-1622
Switched-mode power supply; Classic; 1-phase; 24 VDC output voltage; 5 A output current; TopBoost; DC OK contact



Item No.: 787-1102
Switched-mode power supply; Compact; 1-phase; 24 VDC output voltage; 1.3 A output current; DC-OK LED



Item No.: 787-1112
Switched-mode power supply; Compact; 1-phase; 24 VDC output voltage; 2.5 A output current; DC-OK LED



Item No.: 787-1122
Switched-mode power supply; Compact; 1-phase; 24 VDC output voltage; 4 A output current; DC-OK LED



Item No.: 787-1702
Switched-mode power supply; Eco; 1-phase; 24 VDC output voltage; 1.25 A output current; DC-OK LED



Item No.: 787-1712
Switched-mode power supply; Eco; 1-phase; 24 VDC output voltage; 2.5 A output current; DC-OK LED



Item No.: 787-1722
Switched-mode power supply; Eco; 1-phase; 24 VDC output voltage; 5 A output current; DC-OK LED