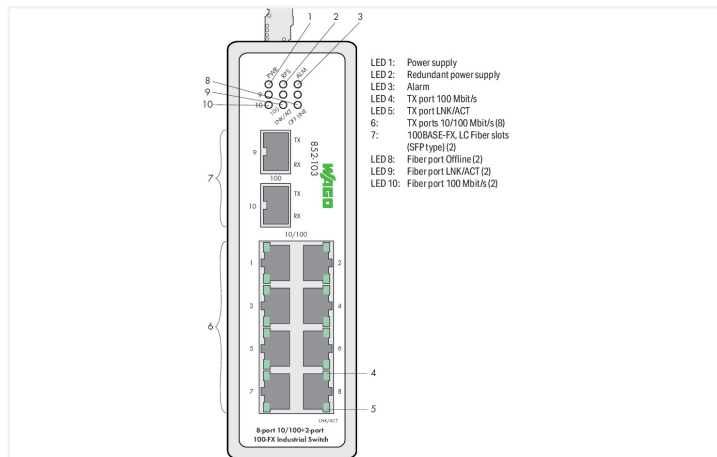


Data Sheet | Item Number: 852-103
Industrial-Switch; 8-port 100Base-TX; 2 Slots 100Base-FX; black

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



Color: ■ black

This unmanaged industrial ETHERNET switch (852-103) has eight Fast ETHERNET ports and 2 SFP slots (100BASE modules) 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 ... 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 Mbit/s ports	8
Number of 100 Mbit/s SFP ports	2
Communication standards	IEEE 802.3 10BASE-T 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 VDC; Cable length:< 3 m
Power consumption (max.)	6.08 W
Power consumption (typ.) (24 V)	5.76 W
ESD (contact/air discharge)	8 KV / 15 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 pkt/s
Controls	12 x DIP switch: Alarm function power supplies and ports 1 ... 10

Technical data

Indicators	Device: LED (PWR, RPS) green: Power supply (primary), redundant power supply (secondary); LED (ALM) red: Alarm; LED (LNK/ACT, 100) green, LED (OFFLINE) red: Status fiber optic ports; per port: LED (100, LNK/ACT) green: Status 100 Mbps, LNK/ACT ports 1 ... 8
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Connection data

Connection technology: communication/fieldbus	Copper cable: 8 x RJ-45; Fiber optic: 2 x SFP slots (e.g., with SFP module and LC fiber-optic connector)
Connection technology: supply	1 x Built-in male connector: 231-436/001-000; included female connector (MCS Connectors): 231-106/026-000

Physical data

Width	50 mm / 1.969 inches
Height	162 mm / 6.378 inches
Depth	120 mm / 4.724 inches

Mechanical data

Weight	922 g
Color	black
Housing material	Aluminum
Conformity marking	CE

Environmental requirements


Ambient temperature (operation)	-40 ... +70 °C (UL max. +60 °C)
Ambient temperature (storage)	-40 ... +85 °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

Environmental Product Compliance	
RoHS Compliance Status	Compliant, No Exemption

Approvals / Certificates

General approvals			Declarations of conformity and manufacturer's declarations		
 					
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
EAC Brjansker Zertifizierungsstelle	TP TC 020/2011	EAC RU C-DE.AM02. B.00087/19	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
KC National Radio Research Agency	Article 58-2, Clause 3	MSIP-REM-W43-ISW852			
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.7			

Downloads

Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 852-103	↓

Documentation

Manual				System Description			
Product Manual 8-Port 100 BASE-TX + 2-Slot 100 BASE-FX Industrial Switch	V 1.0.3 14.07.2020	pdf 1247.70 KB	↓	Industrial Switches – General Product Information		pdf 1873.93 KB	↓
Bid Text				Instruction Leaflet			
852-103	19.02.2019	xml 5.04 KB	↓	Gebrauchs- und Montageanleitung 852-101 / 852-102 / 852-103 / 852-104		pdf 1649.11 KB	↓
852-103	09.05.2018	docx 15.03 KB	↓				

CAD/CAE-Data

CAD data

2D/3D Models 852-103



CAE data

EPLAN Data Portal
852-103



WSCAD Universe
852-103



ZUKEN Portal 852-103



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.: 750-975](#)

ETHERNET RJ-45 connector, IP20; ETHERNET 10/100 Mbit/s; for field assembly



[Item No.: 750-976](#)

PROFINET RJ-45 connector, IP20; ETHERNET 10/100 Mbit/s; for field assembly

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



[Item No.: 289-175](#)

Interface module; RJ-45; PCB terminal blocks, double-row; Cat. 5; in mounting carrier; with shield connection; with shield clamping saddle; 1,50 mm²



[Item No.: 289-172](#)

Interface module; RJ-45; RJ-45; Cat. 5; in mounting carrier



[Item No.: 289-196](#)

Interface module; RJ-45; with power jumper contacts; PCB terminal blocks; Cat. 5

1.1.3 Plug

1.1.3.1 SFP module



Item No.: 852-201/107-002
SFP Module 100BASE; FX Multi-Mode
1310 nm LC; 2 km; silver-colored



Item No.: 852-201/107-030
SFP Module 100BASE; LX Single-Mode
1310 nm LC; 30 km; silver-colored