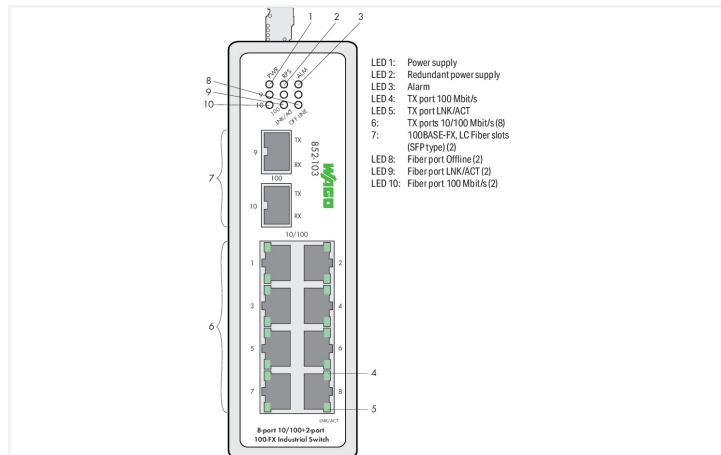


Data Sheet | Item Number: 852-103

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 Mbps ports	8
Number of 100 Mbit/s ports SFP	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
Transmission 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

Technical data

Optical fiber type	Single-mode and multi-mode
Packet throughput	148800 pkt/s
Control Elements	12 x DIP switches: alarm function for supply voltages and ports 1 ... 10
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

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

Mounting type	DIN-35 rail
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Material data

Color	black
Housing material	Aluminum
Weight	922 g
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 %
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

Commercial data

Product Group	27 (special components I/O)
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	TW
GTIN	4045454665951
Customs tariff number	8517620000

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
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Approvals / Certificates

General approvals **Declarations of conformity and manufacturer's declarations**



Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03083
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

Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 852-103 ↓

Documentation

Manual			
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	↓

System Description	
Industrial Switches – General Product Information	pdf 1873.93 KB ↓

Bid Text			
852-103	19.02.2019	xml 5.04 KB	↓
852-103	09.05.2018	docx 15.03 KB	↓

Instruction Leaflet	
Gebrauchs- und Montageanleitung 852-101 / 852-102 / 852-103 / 852-104	pdf 1649.11 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.: [852-202](#)

SFP Module 100BASE; FX Multi-Mode 1310 nm LC; 2 km; DDM; Extreme; silver-colored



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