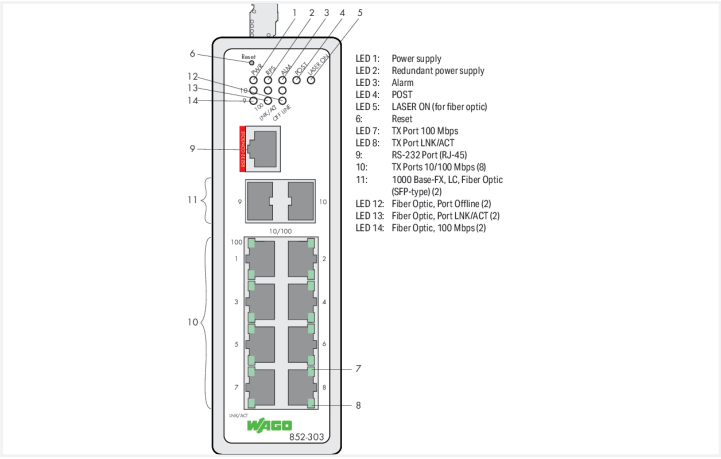
Data Sheet | Item Number: 852-303

Industrial Managed Switch; 8-port 100Base-TX; 2-Slot 1000BASE-SX/LX; black metallic

https://www.wago.com/852-303





Color: ■ black metallic

The configurable 852-303 Industrial ETHERNET Switch is equipped with eight ports 10/100BASE-TX and two SFP slots 100BASE-FX/1000BASE-FX/SX (SFP modules are available as an option).

Packaged in a rugged housing, this switch offers both a redundant power supply and relay-based function monitoring. These functions, along with extensive ETHERNET switch options, make it ideal for a wide range of applications.

Features:

- Web-based/SNMP management
- Redundant DC power supply
- Wide supply voltage range: 12 … 60 VDC
- DIP switch to set alarm functions
- Fully compatible with IEEE 802.3, 802.3u, 802.3z, 802.3x, 802.3ad, 802.3ab, 802.1d, 802.1q, 802.1p, 802.1w and 802.1x standards
- Xpress Ring (redundant ring, recovery < 50 ms)
- Non-blocking, store-and-forward switching, rapid spanning tree protocol (RSTP)
- Autonegotiation at all 10/100BASE-TX ports
- Auto-MDI/MDIX (crossover) at all 10/100BASE-TX ports
- VLAN (802.1q) VID
- IGMP snooping for multicast filtering
- Port configuration, status, statistics
- Port trunking
- SNMP v1/v2 and RMON

Technical data

Switching mode	Store-and-forward; non-blocking
Number of 100 Mbps ports	8
Number of 1 Gb/s ports SFP	2
Communication standards	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX/FX IEEE 802.3z 1000BASE-SX/LX IEEE 802.3x Flow Control IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) IEEE 802.1Q VLAN Tagging IEEE 802.1ab Link Layer Discovery Protocol (LLDP) IEEE 802.1p Prioritization IEEE 802.1X Port Authentication
Redundancy function	Redundant DC power supply; STP; RSTP; MSTP; Jet Ring < 300 ms; Xpress Ring < 20 ms; Dual Homing < 20 ms; Dual Ring; ERPSv2 < 50 ms; LACP
Configuration options	DIP switch for signal contact Command Line Interface SNMPv1/v2c/v3
Diagnostics	Signal contact, Modbus/TCP, port status, port statistics, port load, traffic monitor, SFP information, syslog, mail alarm, SNMP traps Alarm contact; Alarm relay; NO; 1 A at 24 VDC
MAC table (size)	16000 addresses
Jumbo frame size	10000 bytes

Technical data

Supply voltage	12 … 60 VDC; Cable length < 3 m
Power consumption (max.)	12 W
Current consumption (max.)	1500 mA
ESD (contact/air discharge)	8 KV / 15 KV
Transmission rate	Copper cable: 10/100 Mbit/s; Fiber optic:1000 Mbit/s
Transmission medium (communication/fieldbus)	Copper cable: Cat. 5e or higher, 100 m maximum cable length; Fiber optic: SX Multi-Mode, LX Single-Mode
Optical fiber type	Single-mode and multi-mode
VLAN	Port-based and tag-based (4k VIDs)
Control Elements	14 x DIP switches: alarm function for supply voltages and ports 1 … 10, 100/1000 Mbps SFP ports; 1 x Reset button: system restart
Indicators	Device: LED (PWR, RPS, POST) green: Power supply (primary), redundant power supply (secondary), POST function; LED (ALM) red: Alarm; LED (LASER ON) yellow, LED (LNK/ACT, 100) green, LED (OFFLINE) red: Status of 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): 2231-106/026-000
Connection technology: device configuration	1 x RS-232 serial interface

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
Assembly instructions	Standard Compass Safe Distance 0.3 Degree deflection: 750 mm; Steering, Standby, Emergency Compass Safe Distance 1.0 Degree deflection: 450 mm

Material data

Color	black metallic
Housing material	Aluminum
Fire load	0.206 MJ
Weight	910 g
Conformity marking	CE

Environmental requirements

Ambient temperature (operation)	-40 … +70 °C (-25 … +70 °C (DNV GL))
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

Data Act

Pre-contractual Information	Data-Act-AUT-Products-Switches

Commercial data

PU (SPU)	1 pcs
Packaging type	Box
Country of origin	TW
GTIN	4055143327176
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	5A992.C

Environmental Product Compliance

RoHS Compliance Status	Compliant,No Exemption

Approvals / Certificates

General approvals

Approval	Standard	Certificate Name
KC National Radio Research Agency	Article 58-2, Clause 3	MSIP-REM-W43-ISW852
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	-	E175199

Declarations of conformity and manufacturer's declarations

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

Approvals for marine applications

Approval	Standard	Certificate Name
DNV DNV GL SE	-	TAA0000239

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 852-303

Documentation

Manual

Product Manual 8-Port 100BASE-TX + 2-Slot 1000BASE-SX/LX Industrial Switch	V 1.5.0 17.12.2019	pdf 13868.26 KB	

System Description

Industrial Switches – General Product Information	pdf 1873.93 KB	

Bid Text

852-303	19.02.2019	xml 6.15 KB	
852-303	09.05.2018	docx 18.39 KB	
ausschreiben.de 852-303			

CAD/CAE-Data

CAD data

2D/3D Models 852-303

CAE data

EPLAN Data Portal 852-303

WSCAD Universe 852-303

ZUKEN Portal 852-303

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

Continued on next page

1.1.1.1 Connector plug



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

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 Plug

1.1.3.1 SFP module



Item No.: 852-1210
SFP Module 1000BASE; LX Single-Mode 1310 nm LC; 10 km; Extended temperature range; Digital Diagnostics Monitoring; silver-colored



Item No.: 852-1200
SFP Module 1000BASE; SX Multi-Mode 850 nm LC; 0.55 km; Extended temperature range; Digital Diagnostics Monitoring; silver-colored



Item No.: 852-1280
SFP Module 1000BASE; ZX Single-Mode 1550 nm LC; 80 km; Extended temperature range; Digital Diagnostics Monitoring; silver-colored



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

1.1.4 Power supply

1.1.4.1 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.: 787-1635
Switched-mode power supply; Classic; 1-phase; 48 VDC output voltage; 10 A output current; TopBoost; DC OK contact



Item No.: 787-1623
Switched-mode power supply; Classic; 1-phase; 48 VDC output voltage; 2 A output current; DC OK signal



Item No.: 787-1633
Switched-mode power supply; Classic; 1-phase; 48 VDC output voltage; 5 A output current; TopBoost; DC OK contact