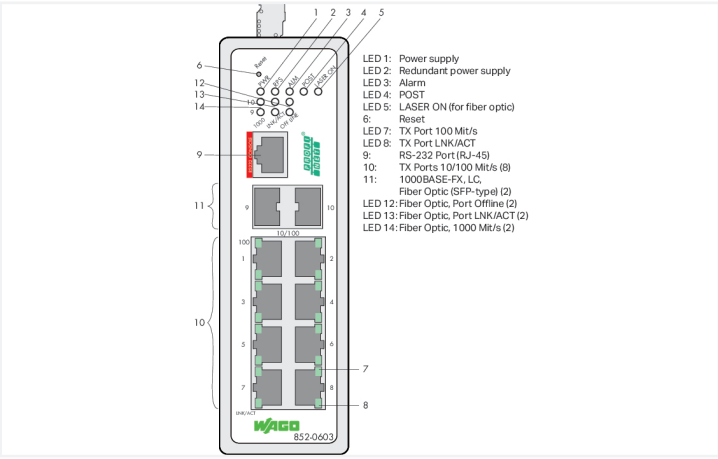
Data Sheet | Item Number: 852-603

Industrial Managed Switch; 8-port 100Base-TX; 2-Slot 1000BASE-SX/LX; PROFINET; Extended temperature range

https://www.wago.com/852-603





The configurable 852-603 Industrial Switch is a managed ETHERNET switch equipped with eight 10/100Base-TX copper ports and two SFP slots. It can be configured as a 100Base-FX or 1000Base-SX/LX device (SFP modules are optional).
Packaged in a rugged housing, this switch offers both a redundant power supply and relay-based function monitoring. The PROFINET certificate (conformity class B) guarantees easy integration into PROFINET automation systems using the device description file (GSD). In addition, the device supports the PROFINET Netload Class II.
The device supports flexible multi-port mirroring configuration via device description file or Web-Based Management. Function blocks allow cyclic PROFINET switch diagnostics to be efficiently implemented within the TIA Portal. An application note that outlines this process is available.

Features:

- Web-based/SNMP management
- Redundant DC power supply
- Power supply range: 12 … 60 VDC
- DIP switches to set alarm functions
- Full compliance with IEEE802.3, 802.3u, 802.3z, 802.3x, 802.1d, 802.1w, 802.1s, 802.1Q, 802.1p standards
- Media redundancy protocol (MRP) as manager (MRM) or client (MRC), redundant ring
- Non-blocking, store-and-forward switching, rapid spanning tree protocol (RSTP)
- Autonegotiation and AUTO-MDI/MDIC (crossover)
- VLAN (802.1Q) VID
- IGMP snooping
- Port configuration, status, statistics
- Port trunking and multi-port mirroring
- SNMP v1/v2c/v3 and RMON
- Time synchronization via SNTP
- Storm control, bandwidth limitation and loop detection

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 IEEE 802.3z 1000BASE-SX/LX IEEE 802.3x Flow Control IEEE 802.1d Spanning Tree Protocol (STP) IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) IEEE 802.1s Multiple Spanning Tree Protocol (MSTP) IEEE 802.1Q VLAN Tagging IEEE 802.1p Class of Service IEEE 802.1ab Link Layer Discovery Protocol (LLDP) PROFINET Conformance Class B
Redundancy function	Redundant DC power supply; STP; RSTP; MSTP; Media redundancy protocol as manager or client

Technical data

Configuration options	DIP switch for signal contact Web-Based Management Command Line Interface SNMPv1/v2c/v3
Diagnostics	Signal contact; Port status; Port statistics; Port load; Traffic monitor; SFP information; Syslog; SNMP traps; PN diagnostics (cyclic and acyclic) Alarm contact; Alarm relay; NO; 1 A at 24 VDC
MAC table (size)	16000 addresses
Jumbo frame size	10000 bytes
Supply voltage	12 … 60 VDC
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
Transmission medium (communication/fieldbus)	Copper cable: Cat. 5e or higher, 100 m maximum cable length
VLAN	Port-based and tag-based (4k VIDs)
Indicators	Device: LED (PWR, RPS, POST) green: Power supply (primary), redundant power supply (secondary), POST function; LED (ALM) red: Alarm or PROFINET error (with active PROFINET mode); 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

Material data

Fire load	0.2 MJ
Weight	885 g

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	4055143908030
Customs tariff number	85176200000

Product Classification

UNSPSC	43222612
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
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)	-	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	-	-

Protocol and fieldbus specific certificates

Approval	Standard	Certificate Name
Profi-Net Siemens AG/ComDeC	-	Z12463

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Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 852-603	

Documentation

Manual

Product Manual Industrial Managed Switch	V 1.0.0 12.12.2019	pdf 16429.06 KB	

System Description

Industrial Switches – General Product Information	pdf 1873.93 KB	

Bid Text

852-603	docx 17.71 KB	
852-603	xml 8.07 KB	

CAD/CAE-Data

CAD data

2D/3D Models 852-603

CAE data

EPLAN Data Portal 852-603
ZUKEN Portal 852-603

Runtime Software

Firmware

0852-0603, Industrial-Managed-Switch	29.11.2023

Libraries

Device Description File

Gerätebeschreibungen PROFINET	Version 3.4 15.11.2024	zip 1533.35 KB

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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

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

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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