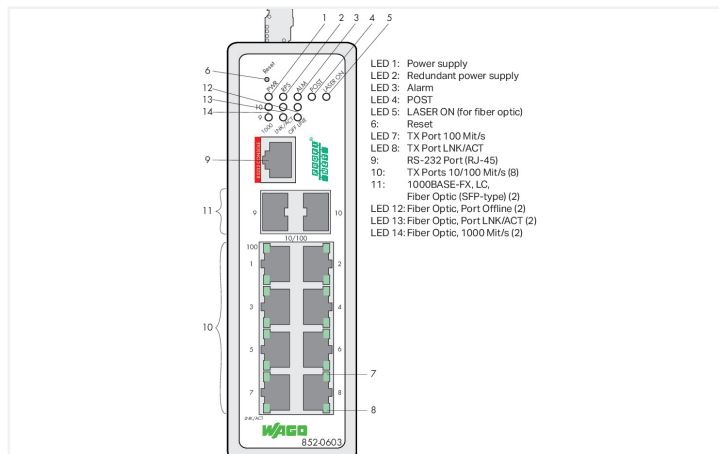


Data Sheet | Item Number: 852-603

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 Mbit/s ports	8
Number of 1 Gbit/s SFP ports	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
Configuration options	DIP switch for signal contact Web-Based Management Command Line Interface SNMPv1/v2c/v3

Technical data

Diagnostics	Signal contact; Port status; Port statistics; Port load; Traffic monitor; SFP information; Syslog; SNMP traps; PN diagnostics (cyclic and acyclic)
MAC table (size)	16000 addresses
Jumbo frame size	10000 bytes
Supply voltage	12 ... 60 VDC
Power consumption (max.)	12 W
ESD (contact/air discharge)	8 KV / 15 KV
Baud 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 VLANs)
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

Physical data

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

Mechanical data

Weight	885 g
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Environmental requirements

Ambient temperature (operation)	-40 ... +70 °C
Ambient temperature (storage)	-40 ... +80 °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	0.302 MJ

Commercial data

ETIM 8.0	EC000734
ETIM 7.0	EC000734
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	TW
GTIN	4055143908030
Customs tariff number	85176200000

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 Brjansker Zertifizierungsstelle	TP TC 020/2011	EAC RU C-DE.AM02. B.00087/19
KC National Radio Research Agency	Article 58-2, Clause 3	MSIP-REM-W43-ISW852
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 61010-2-201	E175199

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

Protocol and fieldbus specific certificates

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

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	CAE data
2D/3D Models 852-603	EPLAN Data Portal 852-603
	ZUKEN Portal 852-603

Runtime Software

Firmware			
0852-0603, Industrial-Managed-Switch	V 02 21.07.2021	zip 8795.54 KB	

Libraries

Device Description File			
GSD-Dateien der Version 2.x für PROFINET	2.33 09.07.2019	zip 43.10 KB	
750-916; GSD files of version 2.x for PROFINET/ series 750/753, 765, 767 and 852	3.0 15.01.2023	zip 2582.40 KB	

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; DDM; 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.: 852-201/107-002

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 unit



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