



Item description

The 852-1605 Industrial Managed Switch is a configurable ETHERNET switch equipped with eight 10/100/1000Base-T copper ports, four SFP-1000Base-SX/LX slots and optional SFP modules.

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

Subject to changes. Please also observe the further product documentation!

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, 802.3ab, 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

Data

Technical data

Switching mode	Store-and-forward; non-blocking
Number of 100 Mbit/s ports	8
Number of 1 Gbit/s SFP ports	4
Communication standards	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX IEEE 802.3ab 1000BASE-T 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

Subject to changes. Please also observe the further product documentation!

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)
MAC table (size)	16000 addresses
Jumbo frame size	10000. Byte
Supply voltage	12 ... 60 VDC
Power consumption (max.)	12 W
ESD (contact/air discharge)	8 KV / 15 KV
Baud rate	Copper cable: 10/1000 Mbit/s; Fiber optic: 1000 Mbit/s
VLAN	Port-based and tag-based (4k VIDs)

Connection data

Connection technology: communication/fieldbus	Copper cable: 8 x RJ-45; Fiber optic: 4 x SFP-slots (e.g., with SFP module and LC fiber-optic connector) Copper cable: 8 x RJ-45; Fiber optic: 4 x SFP; 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 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 50 mm / 1.969 inch
Height	162 mm / 6.378 inches 162 mm / 6.378 inch
Depth	120 mm / 4.724 inches 120 mm / 4.724 inch

Mechanical Data

Weight	945 g
Color	black metallic metallic black

Environmental requirements

Ambient temperature (operation)	-40 ... +70 °C -40 ... 70 °C
---------------------------------	---------------------------------

Subject to changes. Please also observe the further product documentation!

Ambient temperature (storage)	-40 ... +80 °C -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 0.234 MJ

Commercial data

ETIM 8.0	EC000734
ETIM 7.0	EC000734
PU (SPU)	1 pcs 1 Stück
Packaging type	box
Country of origin	TW
GTIN	4055143918701
Customs tariff number	85176200000

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
------------------------	-------------------------

Approvals / Certificates

General approvals

Logo	Approval	Additional Approval Text	Certificate name
	EAC Brjansker Zertifizierungsstelle	TP TC 020/2011	EAC RU C- DE.AM02. B.00087 /19
	UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 61010-2-201	E175199

Declarations of conformity and manufacturer's declarations

Subject to changes. Please also observe the further product documentation!

Logo	Approval	Additional Approval Text	Certificate name
	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Protocol and fieldbus specific certificates

Logo	Approval	Additional Approval Text	Certificate name
	Profi-Net Siemens AG/ComDeC	-	Z12461

Optional accessories

Plugs

SFP module

	Item no.: 852-1200 SFP Module 1000BASE; SX Multi-Mode 850 nm LC; 0.55 km; Extended temperature range; DDM; silver-colored	www.wago.com/852-1200
	Item no.: 852-1210 SFP Module 1000BASE; LX Single-Mode 1310 nm LC; 10 km; Extended temperature range; Digital Diagnostics Monitoring; silver-colored	www.wago.com/852-1210
	Item no.: 852-1280 SFP Module 1000BASE; ZX Single-Mode 1550 nm LC; 80 km; Extended temperature range; Digital Diagnostics Monitoring; silver-colored	www.wago.com/852-1280

Interface module

Interface module

	Item no.: 289-195 Interface module; RJ-45; IDC technology; Cat. 6; in mounting carrier; with shield connection	www.wago.com/289-195
--	--	--

Power supplies

Power supply unit

	Item no.: 787-1632 Switched-mode power supply; Classic; 1-phase; 24 VDC output voltage; 10 A output current; TopBoost; DC OK contact	www.wago.com/787-1632
	Item no.: 787-1633 Switched-mode power supply; Classic; 1-phase; 48 VDC output voltage; 5 A output current; TopBoost; DC OK contact	www.wago.com/787-1633
	Item no.: 787-1635 Switched-mode power supply; Classic; 1-phase; 48 VDC output voltage; 10 A output current; TopBoost; DC OK contact	www.wago.com/787-1635

Subject to changes. Please also observe the further product documentation!

	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	www.wago.com/787-1602
	Item no.: 787-1622 Switched-mode power supply; Classic; 1-phase; 24 VDC output voltage; 5 A output current; TopBoost; DC OK contact	www.wago.com/787-1622
	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	www.wago.com/787-1606
	Item no.: 787-1623 Switched-mode power supply; Classic; 1-phase; 48 VDC output voltage; 2 A output current; DC OK signal	www.wago.com/787-1623

Cables and pluggable connectors

Connector plug

	Item no.: 750-976 PROFINET RJ-45 connector, IP20; ETHERNET 10/100 Mbit/s; for field assembly	www.wago.com/750-976
	Item no.: 750-978/000-012 Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 22; Strain relief	www.wago.com/750-978/000-012
	Item no.: 750-979/000-012 Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568B; AWG 22; Strain relief	www.wago.com/750-979/000-012
	Item no.: 750-978/000-021 Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 24; Strain relief	www.wago.com/750-978/000-021
	Item no.: 750-979/000-022 Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568B; AWG 24; Strain relief	www.wago.com/750-979/000-022
	Item no.: 750-978/000-022 Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 24; Strain relief	www.wago.com/750-978/000-022
	Item no.: 750-979/000-011 Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568A; AWG 22; Strain relief	www.wago.com/750-979/000-011
	Item no.: 750-979/000-013 Connector PROFINET; RJ-45; Cat. 6A; angled; AWG 22; Strain relief	www.wago.com/750-979/000-013
	Item no.: 750-979/000-021 Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568A; AWG 24; Strain relief	www.wago.com/750-979/000-021

Subject to changes. Please also observe the further product documentation!

	Item no.: 750-977/000-011 Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 22	www.wago.com/750-977/000-011
	Item no.: 750-978/000-013 Connector PROFINET; RJ-45; Cat. 6A; straight; AWG 22; Strain relief	www.wago.com/750-978/000-013
	Item no.: 750-978/000-011 Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 22; Strain relief	www.wago.com/750-978/000-011
	Item no.: 750-977/000-022 Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 24	www.wago.com/750-977/000-022
	Item no.: 750-977/000-012 Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 22	www.wago.com/750-977/000-012
	Item no.: 750-977/000-013 Connector PROFINET; RJ-45; Cat. 6A; straight; AWG 22	www.wago.com/750-977/000-013
	Item no.: 750-977/000-021 Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 24	www.wago.com/750-977/000-021

Downloads

Documentation

Manual

Product Manual Industrial Managed Switch 8 Ports 1000BASE-T, 4x1000BASE-SX/LX, PROFINET; EXT	V 1.0.0 2019 Dec 12	pdf 15.8 MB	Download
---	------------------------	----------------	--------------------------

Bid Text

852-1605 docx - Datei	docx 18.0 kB	Download
--------------------------	-----------------	--------------------------

852-1605 X81 - Datei	xml 8.7 kB	Download
-------------------------	---------------	--------------------------

Additional Information

Disposal and Recycling Electrical and electronic equipment, Batteries, Packaging	V 1.1.0 2022 Aug 18	pdf 2.2 MB	Download
---	------------------------	---------------	--------------------------

Subject to changes. Please also observe the further product documentation!

System Description

Industrial Switches – General Product Information

pdf
1.9 MB

[Download](#)

Runtime Software

Firmware

0852-1605, Industrial-Managed-Switch
[WAGO_FW0852-1605_V010202_IX02_F](#)

V 02
2021 Jul 21

zip
9.0 MB

[Download](#)

CAD/CAE-Data

CAD data

2D/3D Models 852-1605

[URL](#) [Download](#)

CAE data

ZUKEN Portal 852-1605

[URL](#) [Download](#)

EPLAN Data Portal 852-1605

[URL](#) [Download](#)

Device Files

Device Description File

750-916; GSD files of version 2.x for PROFINET/ series 750/753, 765, 767 and 852

3.0
2023 Jan 15

zip
2.6 MB

[Download](#)

GSD-Dateien der Version 2.x für PROFINET

2.33
2019 Jul 9

zip
44.1 kB

[Download](#)

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 852-1605

[URL](#) [Download](#)

Industrial Managed Switch; 8 Ports 1000Base-T; 4-Slot 1000BASE-SX/LX; PROFINET;
Extended temperature range; black metallic

Subject to changes. Please also observe the further product documentation!

Installation Notes

Subject to changes. Please also observe the further product documentation!

WAGO GmbH & Co. KG
Hansastraße 27

32423 Minden

Phone: +49 571 887-0 | Fax: +49 571 887-169

Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.