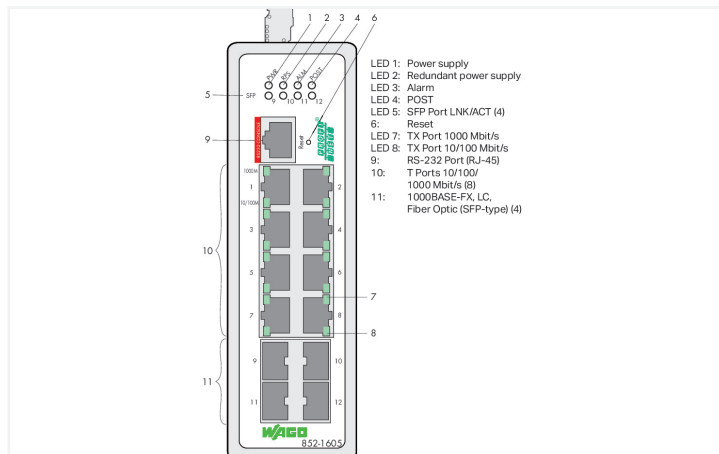


## Data Sheet | Item Number: 852-1605

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

<https://www.wago.com/852-1605>



Color: ■ black metallic

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 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

### 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

### 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)
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: 10/1000 Mbit/s; Fiber optic: 1000 Mbit/s
VLAN	Port-based and tag-based (4k VLANs)

### 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)
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	945 g
Color	black metallic

### 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	4055143918701
Customs tariff number	8517620000

**Environmental Product Compliance**

RoHS Compliance Status	Compliant, No Exemption
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**Approvals / Certificates**

**General approvals**



Approval	Standard	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**

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	-	Z12461

**Downloads**

**Environmental Product Compliance**

Compliance Search
Environmental Product Compliance 852-1605 <a href="#">↓</a>

**Documentation**

Manual			
Product Manual Industrial Managed Switch	V 1.0.0 12.12.2019	pdf 15461.23 KB	<a href="#">↓</a>

System Description	
Industrial Switches – General Product Information	pdf 1873.93 KB <a href="#">↓</a>

Bid Text		
852-1605	xml 8.48 KB	<a href="#">↓</a>
852-1605	docx 17.58 KB	<a href="#">↓</a>

### CAD/CAE-Data

CAD data		CAE data	
2D/3D Models	852-1605	EPLAN Data Portal	852-1605
852-1605		ZUKEN Portal	

### Runtime Software

Firmware			
0852-1605, Industrial-Managed-Switch	V 02 21.07.2021	zip	8805.32 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

## 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