



## Item description

This unmanaged industrial ETHERNET switch (852-1417) has five Gigabit ETHERNET ports, four of which support Power over Ethernet (PoE+) at 30 W. The four PoE+ ports (IEEE 802.3at) can be used simultaneously to power PoE end devices (powered devices). In addition, the switches have two SFP slots (1000BASE modules). The integrated voltage transformer enables operation with 24 VDC, which is the standard supply voltage in control cabinets.

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

Its slim design paired with a DIN-rail adapter simplifies installation in the control cabinet and provides high vibration and shock resistance. Additionally, automatic transmission rate detection (auto-negotiation) and automatic identification of the transmit and receive lines (Auto MDI-X) allow simple plug-and-play operation, saving time and money during commissioning.

## Features:

- 5 ETHERNET ports 10/100/1000 Mbit/s Autonegotiation
- 4 PoE+ ports (IEEE 802.3at)
- 2 Gigabit/s SFP slots
- Front-panel diagnostic LEDs
- Supports Auto-MDI/MDI-X functions
- Full/half-duplex transfer modes for each port
- Store-and-forward switching method
- Integrated address look-up table, supports up to 8000 absolute MAC addresses
- Overvoltage protection
- Data flow control, per IEEE 802.3x Flow Control, in full-duplex mode
- Prioritization of ETHERNET data packets (PROFINET protocol, EtherType=0x8892) per IEEE802.1p
- DIN-35 rail mounting

## Data

### Technical data

Number of 1 Gbit/s ports	5
Number of 1 Gbit/s SFP ports	2
Communication standards	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX/FX IEEE 802.3ab 1000BASE-T IEEE 802.3z 1000BASE-SX/LX IEEE 802.3x Flow Control IEEE 802.3af Power over Ethernet (PoE) IEEE 802.3at High Power over Ethernet (PoE+) IEEE 802.1p Prioritization
MAC table (size)	8000 addresses
Jumbo frame size	10000. Byte
Supply voltage	24 ... 57 VDC
Power consumption (max.)	14 W
Power consumption (note)	134 W with 4 PoE
Baud rate	Copper cable: 10/1000 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

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

Optical fiber type	Single-Mode and Multi-Mode
Topology	Star
Indicators	Device: LED (PWR) green: Power supply; LED (SFP) green: Status of fiber optic ports; LED (PoE 1 ... 4) green: Power over Ethernet; per port: LED (1000, LNK/ACT) green: Status 1000 Mbit/s, LNK/ACT ports 1 ... 5

## Connection data

Connection technology: communication/fieldbus	Copper cable: 5 x RJ-45; Fiber optic: 2 x SFP-slots (e.g., with SFP module and LC fiber-optic connector) Copper cable: 5 x RJ-45; Fiber optic: 2 x SFP; LC fiber-optic connector
Connection technology: supply	1 x Built-in male connector: 231-432/001-000; included female connector (MCS Connectors): 2231-102/026-000 1 x Built-in male connector: 231-432/001-000; included female connector (MCS Connectors): 2231-102/026-000

## Physical data

Width	50 mm / 1.969 inches 50 mm / 1.969 inch
Height	160 mm / 6.299 inches 160 mm / 6.299 inch
Depth	120 mm / 4.724 inches 120 mm / 4.724 inch

## Mechanical Data

Weight	780 g
Color	black
Housing material	Sheet steel
Conformity marking	CE

## Environmental requirements

Ambient temperature (operation)	-40 ... +70 °C (per CE; -10 ... +60 °C per UL 61010) -40 ... 70 °C
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

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

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	0.12 MJ 0.087 MJ

## Commercial data

eCl@ss 10.0	19-17-01-30
eCl@ss 9.0	19-17-01-06
ETIM 8.0	EC000734
ETIM 7.0	EC000734
PU (SPU)	1 pcs 1 Each
Packaging type	box
Country of origin	TW
GTIN	4055143727143
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
	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

### Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
------	----------	--------------------------	------------------

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



EU-Declaration of Conformity  
WAGO GmbH & Co. KG

## Optional accessories

### Interface module

#### Interface module

	<b>Item no.: 289-195</b> Interface module; RJ-45; IDC technology; Cat. 6; in mounting carrier; with shield connection	<a href="http://www.wago.com/289-195">www.wago.com/289-195</a>
--	--	--

### Power supplies

#### Power supply unit

	<b>Item no.: 787-1722</b> Switched-mode power supply; Eco; 1-phase; 24 VDC output voltage; 5 A output current; DC-OK LED	<a href="http://www.wago.com/787-1722">www.wago.com/787-1722</a>
	<b>Item no.: 787-1633</b> Switched-mode power supply; Classic; 1-phase; 48 VDC output voltage; 5 A output current; TopBoost; DC OK contact	<a href="http://www.wago.com/787-1633">www.wago.com/787-1633</a>
	<b>Item no.: 787-1635</b> Switched-mode power supply; Classic; 1-phase; 48 VDC output voltage; 10 A output current; TopBoost; DC OK contact	<a href="http://www.wago.com/787-1635">www.wago.com/787-1635</a>
	<b>Item no.: 787-1226</b> Switched-mode power supply; Compact; 1-phase; 24 VDC output voltage; 6 A output current; DC-OK LED	<a href="http://www.wago.com/787-1226">www.wago.com/787-1226</a>

### Cables and pluggable connectors

#### Connector plug

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

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

	<b>Item no.: 750-978/000-022</b> Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 24; Strain relief	<a href="http://www.wago.com/750-978/000-022">www.wago.com/750-978/000-022</a>
	<b>Item no.: 750-979/000-011</b> Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568A; AWG 22; Strain relief	<a href="http://www.wago.com/750-979/000-011">www.wago.com/750-979/000-011</a>
	<b>Item no.: 750-979/000-013</b> Connector PROFINET; RJ-45; Cat. 6A; angled; AWG 22; Strain relief	<a href="http://www.wago.com/750-979/000-013">www.wago.com/750-979/000-013</a>
	<b>Item no.: 750-979/000-021</b> Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568A; AWG 24; Strain relief	<a href="http://www.wago.com/750-979/000-021">www.wago.com/750-979/000-021</a>
	<b>Item no.: 750-977/000-011</b> Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 22	<a href="http://www.wago.com/750-977/000-011">www.wago.com/750-977/000-011</a>
	<b>Item no.: 750-978/000-013</b> Connector PROFINET; RJ-45; Cat. 6A; straight; AWG 22; Strain relief	<a href="http://www.wago.com/750-978/000-013">www.wago.com/750-978/000-013</a>
	<b>Item no.: 750-978/000-011</b> Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 22; Strain relief	<a href="http://www.wago.com/750-978/000-011">www.wago.com/750-978/000-011</a>
	<b>Item no.: 750-977/000-022</b> Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 24	<a href="http://www.wago.com/750-977/000-022">www.wago.com/750-977/000-022</a>
	<b>Item no.: 750-977/000-012</b> Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 22	<a href="http://www.wago.com/750-977/000-012">www.wago.com/750-977/000-012</a>
	<b>Item no.: 750-977/000-013</b> Connector PROFINET; RJ-45; Cat. 6A; straight; AWG 22	<a href="http://www.wago.com/750-977/000-013">www.wago.com/750-977/000-013</a>
	<b>Item no.: 750-977/000-021</b> Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 24	<a href="http://www.wago.com/750-977/000-021">www.wago.com/750-977/000-021</a>

**Plugs****SFP module**

	<b>Item no.: 852-1200</b> SFP Module 1000BASE; SX Multi-Mode 850 nm LC; 0.55 km; Extended temperature range; DDM; silver-colored	<a href="http://www.wago.com/852-1200">www.wago.com/852-1200</a>
	<b>Item no.: 852-1210</b> SFP Module 1000BASE; LX Single-Mode 1310 nm LC; 10 km; Extended temperature range; Digital Diagnostics Monitoring; silver-colored	<a href="http://www.wago.com/852-1210">www.wago.com/852-1210</a>

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

**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](http://www.wago.com/852-1280)

**Downloads****Documentation****Manual**

Product Manual Industrial ECO Switch; 5Port Gb; 2Slot 1000BASE-SX/LX; EXT; 4PoE Industrial Eco Switch, 5 Ports 1000BASE-T, 2 Slots 1000BASE-SX/-LX, extended Temperature, 4 * Power over Ethernet	V 1.2.2 2021 Mar 2	pdf 1.4 MB	Download
---	-----------------------	---------------	----------

**Bid Text**

852-1417 X81 - Datei	2019 Feb 19	xml 6.5 kB	Download
852-1417 doc - Datei	2018 Jul 23	doc 32.8 kB	Download
ausschreiben.de 852-1417		URL	Download

**Instruction Leaflet**

Gebrauchs- und Montageanleitung 852-1417 Industrial-ETHERNET-Switch	V 1.0.0	pdf 740.6 kB	Download
--	---------	-----------------	----------

**System Description**

Industrial Switches – General Product Information		pdf 1.9 MB	Download
---	--	---------------	----------

**Additional Information**

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

**CAD/CAE-Data****CAD data**

2D/3D Models 852-1417		URL	Download
-----------------------	--	-----	----------

**CAE data**

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

ZUKEN Portal 852-1417

URL

Download

## Environmental Product Compliance

### Compliance Search

Environmental Product Compliance 852-1417

URL

Download

Industrial-ECO-Switch; 5-port 1000Base-T; 2-Slot 1000BASE-SX/LX; Extended temperature range; 4 \* Power over Ethernet

## Installation Notes

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

WAGO GmbH & Co. KG  
Hansastra. 27

32423 Minden

Phone: +49571 887-0 | Fax: +49571 887-169

Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

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