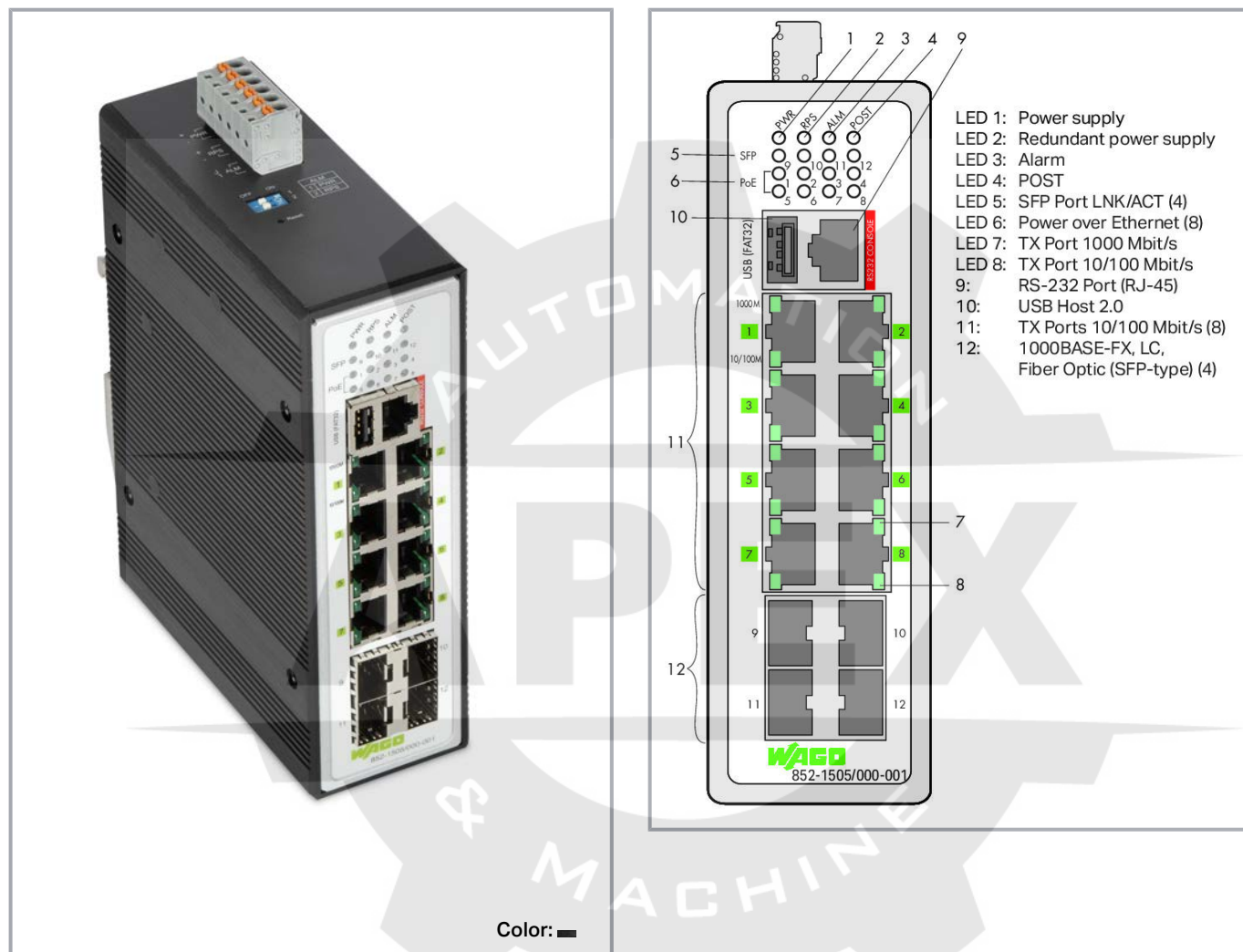


## Data sheet | Item number: 852-1505/000-001

Industrial managed switch - Power over Ethernet; 8 - 10/100/1000 Mb/s RJ45 ports; 4 - 1000 Mb/s Fiber Optic ports; Extended temperature range; USB

[www.wago.com/852-1505\\_000-001](http://www.wago.com/852-1505_000-001)



### Item description

The configurable 852-1505/000-001 Industrial ETHERNET Switch features eight 10/100/1000Base-T ports that all support Power over Ethernet (PoE+) at 30 W, and has four SFP-1000Base-SX/LX ports (SFP modules are available as an option). All eight PoE+ ports can be operated simultaneously.

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

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Germantown, WI 53022  
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Email: [info.us@wago.com](mailto:info.us@wago.com) | Web: [www.wago.us](http://www.wago.us)

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Packaged in a rugged housing, this switch offers both a redundant power supply and relay-based function monitoring. These functions, along with extensive ETHERNET switch options, make it ideal for a wide range of applications.

#### Features:

- Web-based/SNMP management
- Redundant DC power supply
- Power supply range: 24 ... 57 VDC
- Diagnostics via Modbus® and SNMP
- DIP switches to set alarm functions
- Autonegotiation at all 10/100/1000Base-T ports
- Auto-MDI/MDIX (crossover) at all 10/100/1000Base-T ports
- IGMP snooping for multicast filtering
- Port configuration, status, statistics
- Port trunking
- SNMP v1/v2c and RMON
- Approval (IEC 61850-3) for the energy market
- Firmware update and switch configuration via USB storage medium

#### Data

##### Technical data

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Switching mode                 | Store-and-forward; non-blocking                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Number of 1000BASE-T ports     | 8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Number of 1000Base SX/LX ports | 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Communication standards        | IEEE 802.3 10BASE-T<br>IEEE 802.3u 100BASE-TX<br>IEEE 802.3ab 1000BASE-T<br>IEEE 802.3z 1000BASE-SX/LX<br>IEEE 802.3x Flow Control<br>IEEE 802.1d Spanning Tree Protocol (STP)<br>IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)<br>IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)<br>IEEE 802.1Q VLAN Tagging<br>IEEE 802.1p Prioritization<br>IEEE 802.1x Port Authentication<br>IEEE 802.1ab Link Layer Discovery Protocol (LLDP)<br>IEEE 802.3ad Link Aggregation<br>IEEE 1588v2 Precision Time Protocol (PTP)<br>IEEE 802.3af Power over Ethernet (PoE)<br>IEEE 802.3at High Power over Ethernet (PoE+)<br>ITU-T G8032v1/v2 Ethernet Ring Protection Switching (ERPS) |
| Redundancy function            | Redundant DC power supply; STP; RSTP; MSTP; Jet Ring < 300 ms;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

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|                                              |                                                                                                                                                                                                                                                                           |
|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                              | Xpress Ring < 20 ms; Dual Homing < 20 ms; Dual Ring; ERPSv2 < 50 ms; LCAP                                                                                                                                                                                                 |
| Configuration options                        | DIP switch for signal contact<br>Web-Based Management<br>Command Line Interface<br>SNMPv1/v2c/v3<br>USB storage medium                                                                                                                                                    |
| Diagnostics                                  | Signal contact; Modbus TCP; Port status; Port statistics; Port load; Traffic monitor; SFP information; Syslog; Mail alarm; SNMP traps; Loop detection; ...                                                                                                                |
| MAC table (size)                             | 16000 addresses                                                                                                                                                                                                                                                           |
| Jumbo frame size                             | 10000.Byte                                                                                                                                                                                                                                                                |
| Supply voltage                               | 24 ... 57 VDC                                                                                                                                                                                                                                                             |
| Power consumption without PoE                | 18 W                                                                                                                                                                                                                                                                      |
| Full load power consumption                  | 258 W with 8 PoE+                                                                                                                                                                                                                                                         |
| ESD (contact/air discharge)                  | 8 KV / 15 KV                                                                                                                                                                                                                                                              |
| 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                                                                                                                                                                   |
| Optical fiber type                           | Single-Mode and Multi-Mode                                                                                                                                                                                                                                                |
| VLAN                                         | Port-based and tag-based (4k VIDs)                                                                                                                                                                                                                                        |
| Controls                                     | 14 x DIP switch: Alarm function power supplies and ports 1 ... 12                                                                                                                                                                                                         |
| Indicators                                   | Device: LED (PWR, RPS, POST) green: power supply (primary), redundant power supply (secondary), POST function; LED (ALM) red: Alarm; LED (SFP) green, Status fiber optic ports; per port: LED (1000M, 10/100M) green, yellow: Status 1000 Mbps, 10/100 Mbps ports 1 ... 8 |

## Connection data

|                                               |                                                                                                            |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------|
| Connection technology: communication/fieldbus | 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 |

## Physical data

|        |                     |
|--------|---------------------|
| Width  | 50 mm / 1.969 inch  |
| Height | 162 mm / 6.378 inch |
| Depth  | 120 mm / 4.724 inch |

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## Mechanical data

|        |                |
|--------|----------------|
| Weight | 955 g          |
| Color  | metallic black |

## Environmental requirements

|                                          |                    |
|------------------------------------------|--------------------|
| Surrounding air temperature (operation)  | -40 ... 70 °C      |
| Surrounding air 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   |

## Commercial data

|                       |               |
|-----------------------|---------------|
| Packaging type        | BOX           |
| Country of origin     | TW            |
| GTIN                  | 4055143897969 |
| Customs tariff number | 8517620090    |

## Approvals / Certificates

### Ship Approvals

| Logo                                                                                | Approval                       | Additional Approval Text | Certificate name |
|-------------------------------------------------------------------------------------|--------------------------------|--------------------------|------------------|
|   | <b>DNV</b><br>DNV Germany GmbH | DNVGL-CG-339,Dec.2019    | TAA00002YN       |
|  | <b>LR</b><br>Lloyds Register   | -                        | LR2128525TA      |

### Other Approvals

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

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IEC  
Interocean EMC Technology Corp.

IEC 61850-3

18A092117E\_C

## UL-Approvals

| Logo                                                                             | Approval                                                  | Additional Approval Text | Certificate name |
|----------------------------------------------------------------------------------|-----------------------------------------------------------|--------------------------|------------------|
|  | UL<br>Underwriters Laboratories Inc. (ORDINARY LOCATIONS) | UL 61010-2-201           | E175199          |

## Optional accessories

## General accessories

|                                                                                 |                                                                                                                  |                                                                  |
|---------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
|  | Item no.: 852-1200<br>Fiber-optic module; 850 nm; 1000Base-SX multi-mode LC; 0.55 km; extended temperature range | <a href="http://www.wago.com/852-1200">www.wago.com/852-1200</a> |
|  | Item no.: 852-1210<br>Fiber-optic module; 1310 nm; 1000Base-LX single-mode LC; 10 km; extended temperature range | <a href="http://www.wago.com/852-1210">www.wago.com/852-1210</a> |
|  | Item no.: 852-1280<br>Fiber-optic module; 1550 nm; 1000Base-ZX single-mode LC; 80 km; extended temperature range | <a href="http://www.wago.com/852-1280">www.wago.com/852-1280</a> |

## Interface module

|                                                                                    |                                                                                                                   |                                                                |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
|  | Item no.: 289-195<br>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

|                                                                                    |                                                                                            |                                                                  |
|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------------|
|  | Item no.: 787-1633<br>EPSITRON® CLASSIC power supply; 2-phase; output voltage 48 VDC; 5 A  | <a href="http://www.wago.com/787-1633">www.wago.com/787-1633</a> |
|  | Item no.: 787-1635<br>EPSITRON® CLASSIC power supply; 2-phase; output voltage 48 VDC; 10 A | <a href="http://www.wago.com/787-1635">www.wago.com/787-1635</a> |

## Cables and pluggable connectors

|                                                                                   |                                                                                                 |                                                                                |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
|  | Item no.: 750-976<br>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>                 |
|  | Item no.: 750-977/000-011<br>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> |
|  | Item no.: 750-977/000-012<br>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> |
|  | Item no.: 750-977/000-013<br>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> |

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|                                                                                   |                                                                                                                     |                                                                                |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
|    | <b>Item no.: 750-977/000-021</b><br>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> |
|    | <b>Item no.: 750-977/000-022</b><br>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.: 750-978/000-011</b><br>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.: 750-978/000-012</b><br>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.: 750-978/000-013</b><br>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.: 750-978/000-021</b><br>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.: 750-978/000-022</b><br>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><br>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.: 750-979/000-012</b><br>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.: 750-979/000-013</b><br>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><br>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.: 750-979/000-022</b><br>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> |

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

|                                                                                                              |                         |                |          |
|--------------------------------------------------------------------------------------------------------------|-------------------------|----------------|----------|
| 8 Port 1000BASE-T + 4-Slot 1000BASE SX-LX Industrial Managed Switch<br>Extended Temperature Range; 8PoE; USB | V 1.1.0<br>Apr 15, 2021 | pdf<br>16.5 MB | Download |
|--------------------------------------------------------------------------------------------------------------|-------------------------|----------------|----------|

**Bid Text**

|                                  |              |                 |          |
|----------------------------------|--------------|-----------------|----------|
| 852-1505/000-001<br>docx - Datei | May 22, 2019 | docx<br>18.0 kB | Download |
| 852-1505/000-001<br>X81 - Datei  | May 22, 2019 | xml<br>8.0 kB   | Download |

**Runtime Software****Firmware**

|                                                                                                                                                                          |                   |                |          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------------|----------|
| Firmware: 852-1505/000-001 Industrial-Managed-Switch; 8-Port 1000BASE-T; 4-Slot 1000BASE-SX/LX; Extended temperature range; 8 * Power over Ethernet; USB; metallic black | 11<br>May 6, 2021 | zip<br>13.0 MB | Download |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------------|----------|

**CAD files****CAD data**

|                               |     |          |
|-------------------------------|-----|----------|
| 2D/3D Models 852-1505/000-001 | URL | Download |
|-------------------------------|-----|----------|

**CAE data**

|                                    |     |          |
|------------------------------------|-----|----------|
| EPLAN Data Portal 852-1505/000-001 | URL | Download |
| ZUKEN Portal 852-1505/000-001      | URL | Download |

**Environmental Product Compliance****Compliance Search**

|                                                                                                                                                                                                    |     |          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----------|
| Environmental Product Compliance 852-1505/000-001<br>Industrial-Managed-Switch; 8-Port 1000BASE-T; 4-Slot 1000BASE-SX/LX; Extended temperature range; 8 * Power over Ethernet; USB; metallic black | URL | Download |
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## Installation Notes



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