



# TSW202

## MANAGED PoE+ ETHERNET SWITCH



Energy & utilities



Enterprise



Industrial & automation



Retail



Smart city

### MANAGED SWITCH

L2 with additional L3 features for enhanced management and control

### POE+ & SFP

8 x port PoE+ switch with 2 x SFP ports for fiber optic communication

### PROFINET & MORE

Supports PROFINET for automated data processing alongside other protocols, like EtherNet/IP and MRP

### TSWOS

Teltonika Networks OS for switches, intuitively designed for infinite configurations

### Ethernet

ETH	Multi-layer managed 8 x ETH ports, 10/100/1000 Mbps supports auto MDI/MDIX crossover
Fibre	2 x SFP ports
IEEE 802.3 series standards	802.3i, 802.3u, 802.3ab, 802.3x, 802.3az, 802.3z, 802.3ad

### INDUSTRIAL PROTOCOLS

Profinet	Profinet Class B conformance (available with optional order code)
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### POE OUT

PoE+ ports	Port 1 - 8
PoE standards	IEEE 802.3af (PoE, Type 1) and IEEE 802.3at (PoE+, Type 2), Alternative A (Batch 15 and all batches from Batch 17 onward) IEEE 802.3af (PoE, Type 1) and IEEE 802.3at (PoE+, Type 2), Alternative B (Batches 1–14 and Batch 16)
PoE Max Power per Port (at PSE)	30 W
Total PoE Power Budget (at PSE)	240 W
Maximum Ethernet cable length	100 m

### Services

EtherNet/IP	Yes
SNMP V2, V3	Yes
LLDP	Yes
Network Management	802.1p class of service, 802.1x port-based network access control, 802.1Q VLAN

### Network

MRP	MRP client role, MRP manager role
Port aggregation	802.3ad (LACP)
L2 features	Loop protection, Forwarding table, VLAN, STP/RSTP
DHCP	DHCP server, DHCP client, DHCP static leases capable of using MAC with wildcards
Port Settings	Enable/disable, link speed control, port isolation, PoE Management, EEE (802.3az) management, Port Mirroring
L3 Features	Static IPv4 routing, static IPv6 routing, DHCPv6 client, static IPv6 address
Routing	Dynamic routing (BGP, OSPF v2, RIP v1/v2, EIGRP)

## Security

Authentication	PAM — preshared key, Radius & TACACS+, IP & login attempts block
MAC filtering support	Allow specific MAC addresses to connect through specified ports, ignore unauthorized or disable the port if an unauthorized MAC address is detected

## QoS

QOS	Port priority, DSCP priority, 802.1p priority, TOS
Scheduling method	SP/WFQ/WRR
Bandwidth control	Rate limiting, storm control
Traffic Shaper	Port-based shaping

## Diagnostics

Tools	Cable diagnostic, ping, traceroute, nslookup
Ping reboot	Capability to restart PoE in a specific port

## API

Teltonika Networks Web API (beta) support	Expand your device's possibilities by using a set of configurable API endpoints to retrieve or change data. For more information, please refer to this documentation: <a href="https://developers.teltonika-networks.com">https://developers.teltonika-networks.com</a>
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## System Characteristics

RAM	128MB, DDR3
FLASH storage	16 MB serial flash

## Firmware/Configuration

WEB UI	Update FW from file, check FW on server, configuration profiles, configuration backup
FOTA	Update FW
RMS	Update FW/configuration for multiple devices at once
Keep settings	Update FW without losing current configuration

## FIRMWARE CUSTOMISATION

Operating system	TSWOS (OpenWrt based Linux OS)
Supported languages	Busybox shell, Lua, C, C++
Development tools	SDK package with build environment provided

### Performance Specifications

Bandwidth (Non-blocking)	20 Gbps
Forwarding rate	14.88 Mpps
Packet buffer	512 KB
MAC address table size	8K entries
Jumbo frame support	10000 bytes

### Power

Connector	2-pin industrial DC power socket
Input voltage range	7 – 57 VDC
PoE-Out input voltage range	44 – 57 VDC
Power consumption	Idle: < 3 W / Max: 8 W / PoE Max: 248 W

### Physical Interfaces

Ethernet	8 x RJ45 ports, 10/100/1000 Mbps
Fibre	2 x SFP ports
Status LEDs	1 x Power LED, 1 x Aux LED, 16 x ETH status LEDs, 2 x SFP status LEDs
Power	1 x 2-pin industrial DC power socket
Reset	Software reset button
Other	1 x Grounding screw

### Physical Specification

Casing material	Anodized aluminum housing and panels
Dimensions (W x H x D)	132 x 44.2 x 122.2 mm
Weight	610 g
Mounting options	Integrated DIN rail bracket; wall mount and flat surface (additional kit needed)

### Operating Environment

Operating temperature	-40 °C to 75 °C
Operating humidity	5% to 95% non-condensing
Ingress Protection Rating	IP30

### Regulatory & Type Approvals

Regulatory	CE, UKCA, RCM, ANRT, FCC, IC, CB, NBTC, PROFINET, CITC, RoHS, REACH, WEEE, SDPPI (POSTEL), JATE, Kenya, ICASA, Giteki, UL Safety
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## EMC Emissions & Immunity

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Standards	EN 55032:2015 + A11:2020 + A1:2020 EN 55035:2017 + A11:2020 EN IEC 61000-3-2: 2019 + A1:2021 EN 61000-3-3: 2013 + A1:2019 + A2:2021
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ESD	EN 61000-4-2:2009
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Radiated Immunity	EN IEC 61000-4-3:2020
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EFT	EN 61000-4-4:2012
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Surge Immunity (AC Mains Power Port)	EN 61000-4-5:2014 + A1:2017
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CS	EN 61000-4-6:2014
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DIP	EN 61000-4-11:2020
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## Safety

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Standards	<b>CE:</b> EN IEC 62368-1:2020 + A11:2020 <b>RCM:</b> AS/NZS 62368.1:2022 <b>CB:</b> IEC 62368-1:2018
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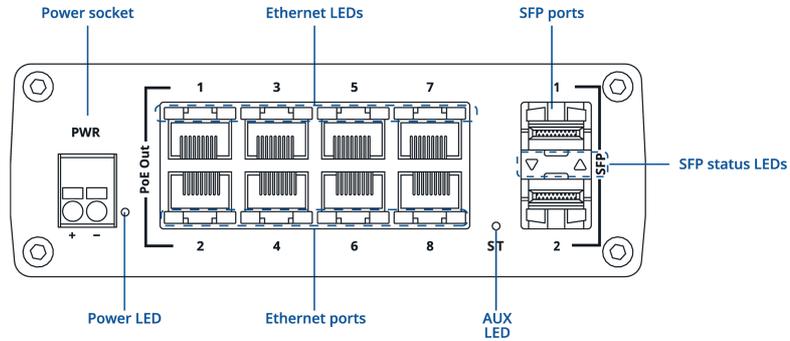
## Safety (Ordinary Locations)

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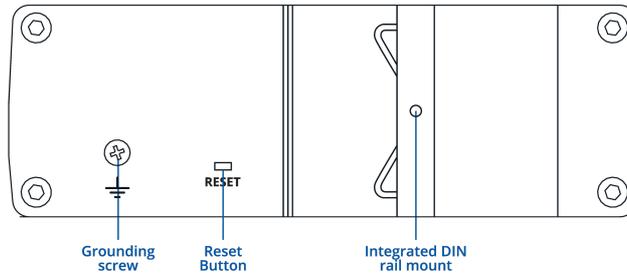
Standards	UL/CSA Safety: UL 62368-1 (3rd Ed., Rev. December 13, 2019), C22.2 No. 62368-1:19 (3rd Ed., Rev. December 13, 2019)
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## Hardware

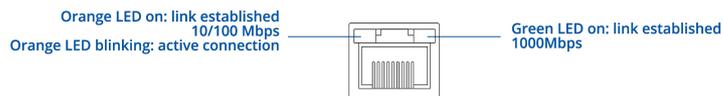
### FRONT VIEW



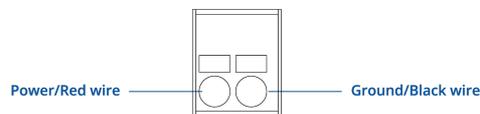
### BACK VIEW



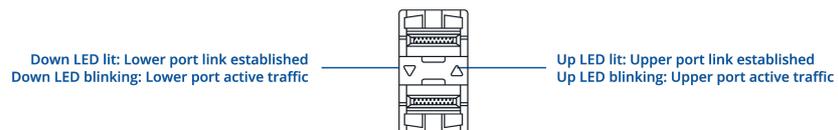
### RJ45 LED MEANING



### POWER SOCKET PINOUT



### SFP LED MEANING



## Ordering

Standard package\*



TSW202



QUICK START GUIDE

\*Standard package contents may differ based on standard order codes.

For more information on all available packaging options – please [contact us](#) directly.

## Classification codes

**HS Code:** 851762

**HTS:** 8517.62.00

### Available versions

TSW202 *****0 <b>PROFINET</b> <b>disabled by</b> <b>default</b>	N/A	TSW202000000 / Standard package without PSU TSW202000300 / Standard package with EU PSU without connector TSW202000040 / Standard package with US PSU without connector
TSW202 *****1 <b>Profinet Class</b> <b>B</b> <b>conformance</b>	N/A	TSW202000001 / Standard package without PSU

## TSW202 spatial measurements

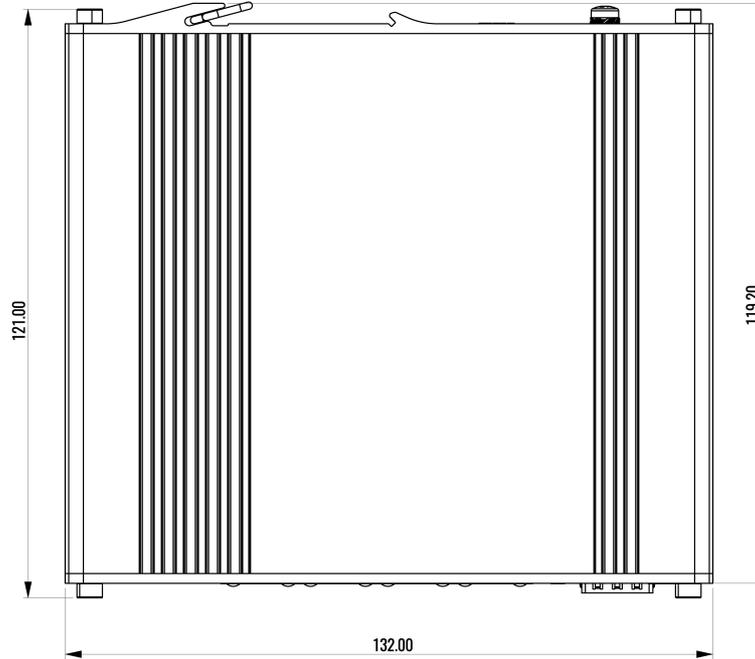
### Available versions

Device housing (W x H x D)*	132 x 44.2 x 122.2 mm
Box:	338 x 57 x 171

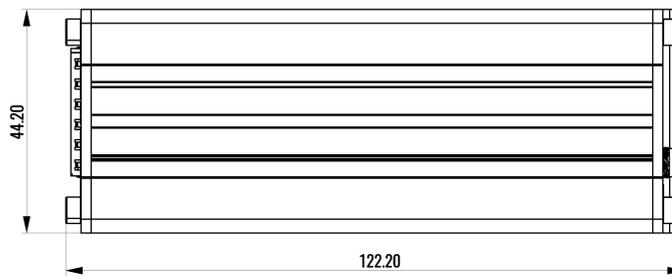
\*Housing measurements are presented without antenna connectors and screws; for measurements of other device elements look to the sections below

**TOP VIEW**

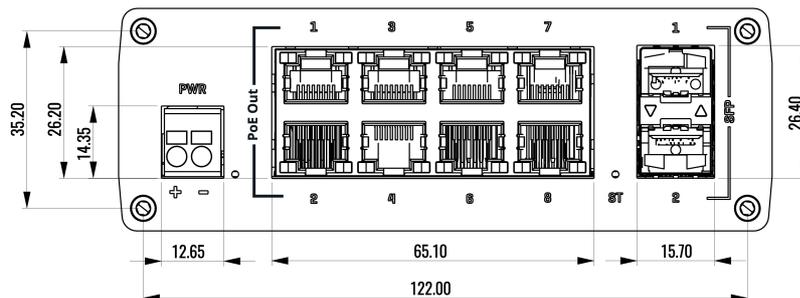
The figure below depicts the measurements of device and its components as seen from the top:


**RIGHT VIEW**

The figure below depicts the measurements of device and its components as seen from the right side:

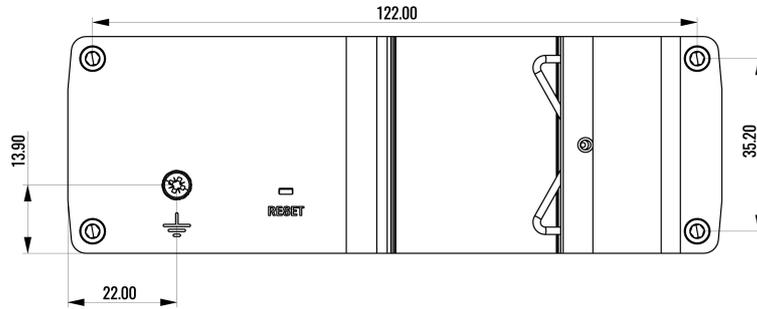

**FRONT VIEW**

The figure below depicts the measurements of device and its components as seen from the front panel side:



## REAR VIEW

The figure below depicts the measurements of device and its components as seen from the back panel side:



## MOUNTING SPACE REQUIREMENTS

The figure below depicts an approximation of the device's dimensions when cables and antennas are attached:

