



# TSW202

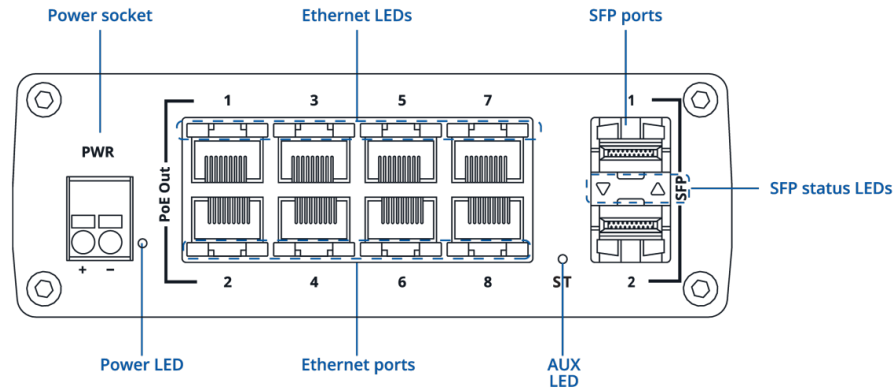
v1.22

Ensured by PROFINET

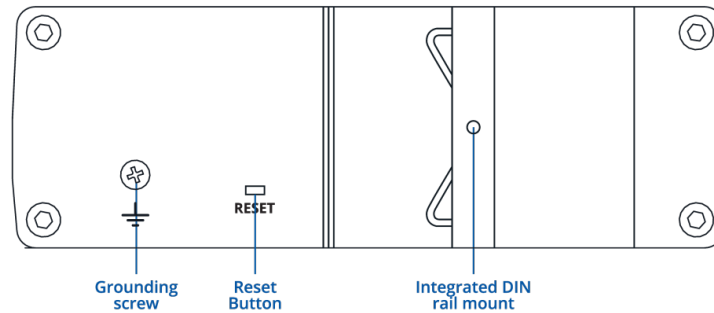


## HARDWARE

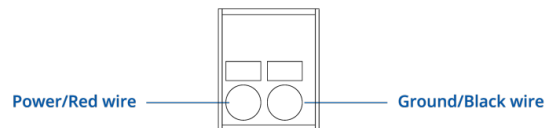
### FRONT VIEW



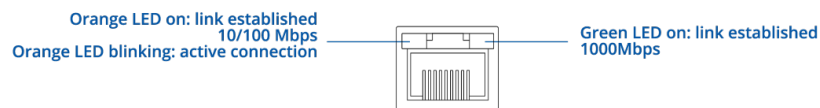
### BACK VIEW

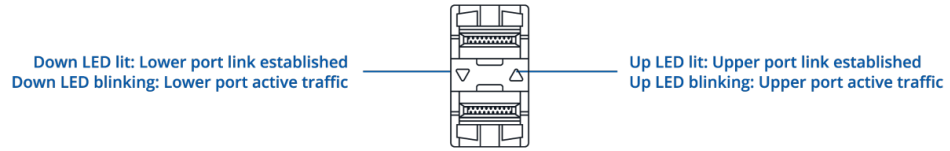


### POWER SOCKET PINOUT



### RJ45 LED MEANING



**SFP LED MEANING**

## FEATURES

### Ethernet

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

### INDUSTRIAL PROTOCOLS

<b>Profinet</b>	Profinet Class B conformance (available with optional order code)
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### POE OUT

<b>PoE+ ports</b>	Port 1 - 8
<b>PoE standards</b>	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)
<b>PoE Max Power per Port (at PSE)</b>	30 W
<b>Total PoE Power Budget (at PSE)</b>	240 W
<b>Maximum Ethernet cable length</b>	100 m

### Services

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

### Network

<b>MRP</b>	MRP client role, MRP manager role
<b>L2 features</b>	Loop protection, Forwarding table, VLAN, STP/RSTP
<b>DHCP</b>	DHCP server, DHCP client, DHCP static leases capable of using MAC with wildcards
<b>Port Settings</b>	Enable/disable, link speed control, port isolation, PoE Management, EEE (802.3az) management, Port Mirroring
<b>L3 Features</b>	Static IPv4 routing, static IPv6 routing, DHCPv6 client, static IPv6 address

## Security

Authentication	PAM — preshared key, Radius & TACACS+, IP & login attempts block
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## 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**

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

**Power**

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

**Physical Interfaces**

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

**Physical Specification**

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

**Operating Environment**

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

**Regulatory & Type Approvals**

<b>Regulatory</b>	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**

<b>Standards</b>	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
<b>ESD</b>	EN 61000-4-2:2009
<b>Radiated Immunity</b>	EN IEC 61000-4-3:2020
<b>EFT</b>	EN 61000-4-4:2012
<b>Surge Immunity (AC Mains Power Port)</b>	EN 61000-4-5:2014 + A1:2017
<b>CS</b>	EN 61000-4-6:2014
<b>DIP</b>	EN 61000-4-11:2020

**Safety**

<b>Standards</b>	<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)**

<b>Standards</b>	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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ORDERING

STANDARD PACKAGE\*



TSW202



QSG (QUICK START GUIDE)

- TSW202
- QSG (Quick Start Guide)
- Packaging box

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

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

TSW202 SPATIAL MEASUREMENTS



## PHYSICAL SPECIFICATION

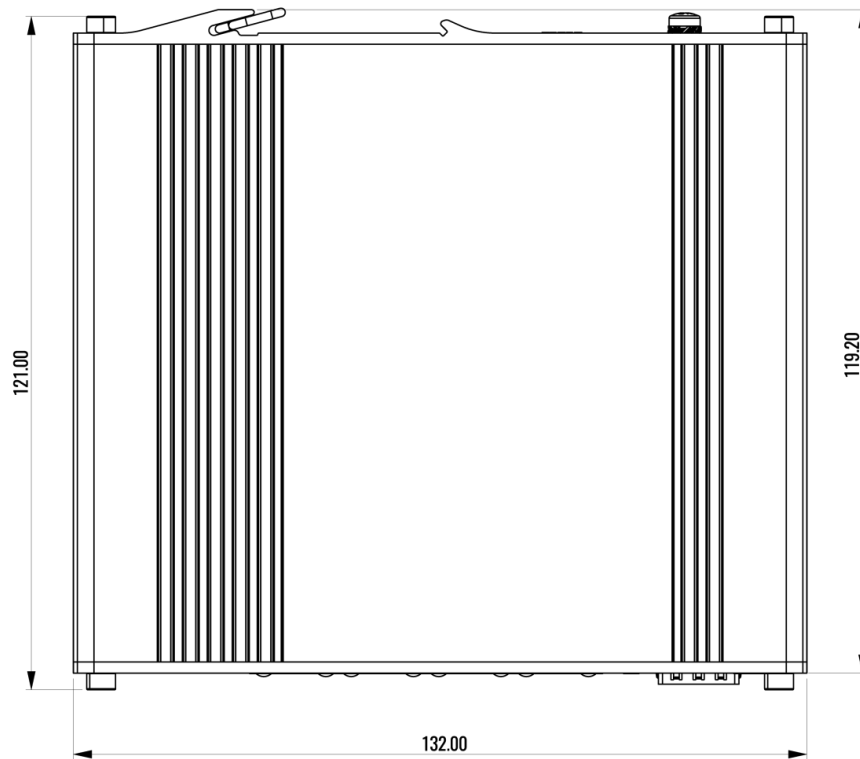
**Device housing (W x H x D):** 132 x 44.2 x 122.2 mm

**Box (W x H x D):** 125 x 136x 47 mm

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

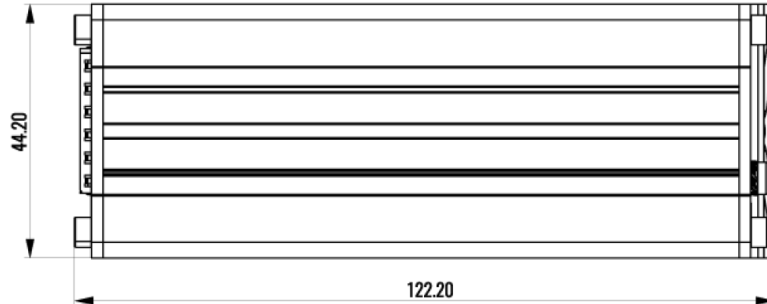
## TOP VIEW

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



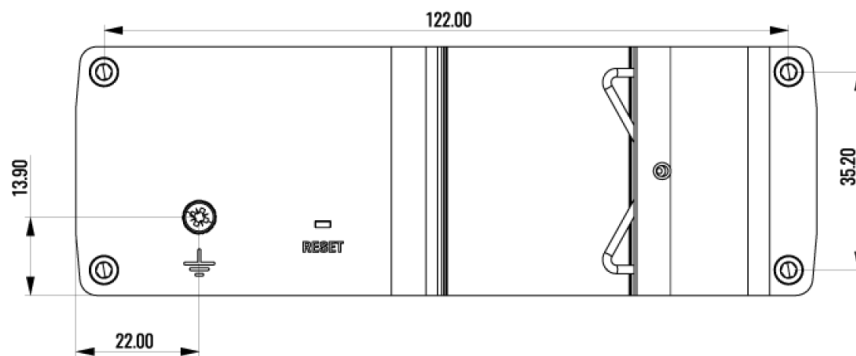
### RIGHT VIEW

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



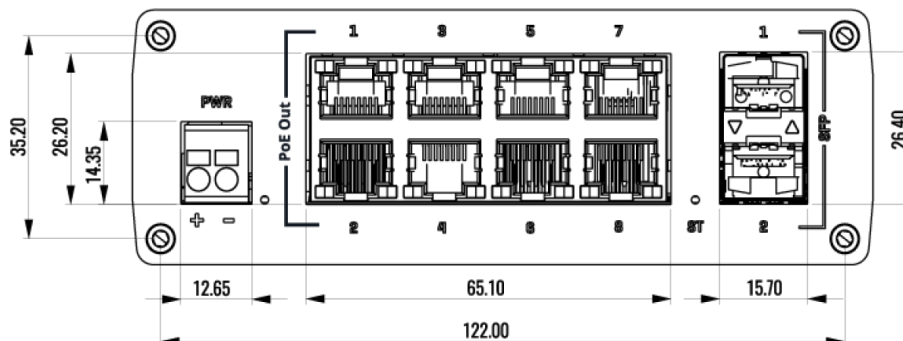
### REAR VIEW

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



### FRONT VIEW

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



## MOUNTING SPACE REQUIREMENTS

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

