



# TSW202

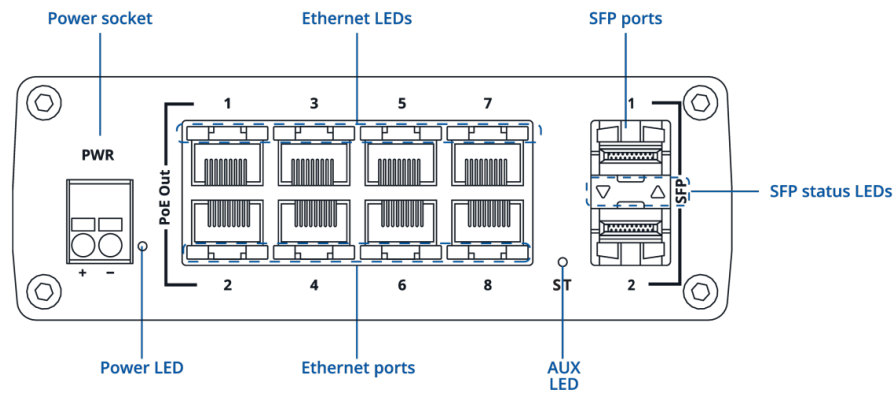
v1.3

Ensured by PROFINET

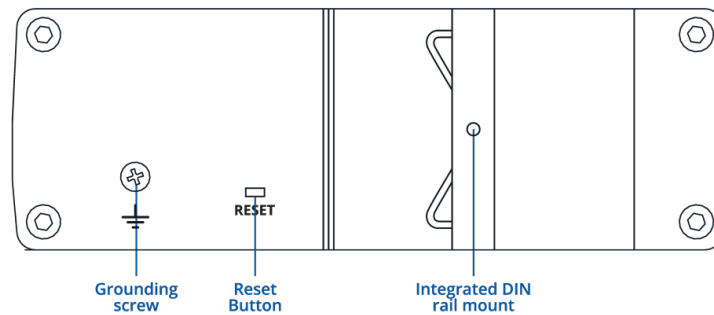


## HARDWARE

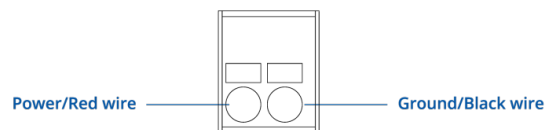
### FRONT VIEW



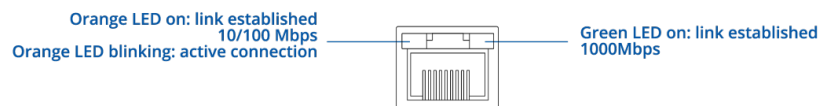
### BACK VIEW

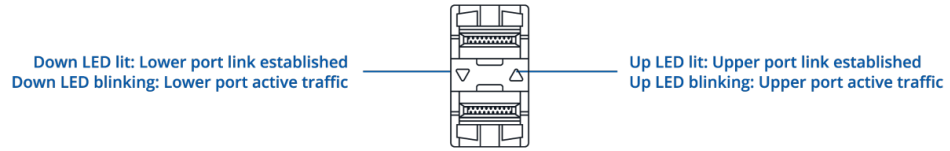


### POWER SOCKET PINOUT



### 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, 802.3az
------------------------------------	--

### INDUSTRIAL PROTOCOLS

<b>Profinet</b>	Profinet Class B conformance (available with optional order code)
-----------------	---

### 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

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

## QoS

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

## Diagnostics

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

## API

<b>Teltonika Networks Web API (beta) support</b>	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>
--	---

## System Characteristics

<b>RAM</b>	128MB, DDR3
<b>FLASH storage</b>	16 MB serial flash

## Firmware / Configuration

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

## FIRMWARE CUSTOMISATION

<b>Operating system</b>	TSWOS (OpenWrt based Linux OS)
<b>Supported languages</b>	Busybox shell, Lua, C, C++
<b>Development tools</b>	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

<b>Regulatory</b>	CE, UKCA, RCM, ANRT, FCC, IC, CB, NBTC, PROFINET, CITC, RoHS, REACH, WEEE, SDPPI (POSTEL), JATE, Kenya, ICASA, Giteki, UL Safety
-------------------	--

## EMC Emissions & Immunity

<b>Standards</b>	EN 55032:2015 + A1:2020 + A1:2020 EN 55035:2017 + A1:2020 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 + A1:2020 <b>RCM:</b> AS/NZS 62368.1:2022 <b>CB:</b> IEC 62368-1:2018
------------------	--

## 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)
------------------	---

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

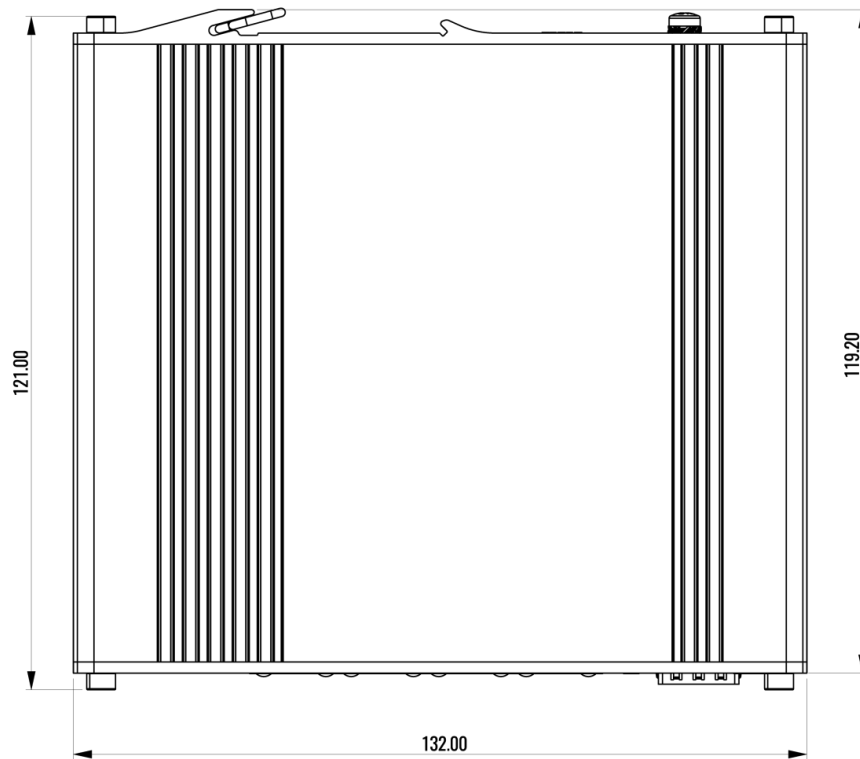
**Device housing (W x H x D):** 132 x 44.2 x 122.2 mm

**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.

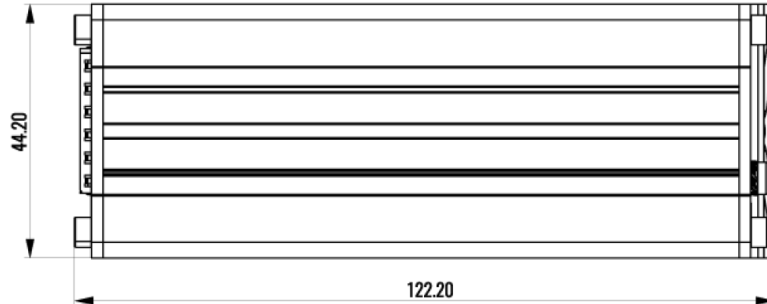
## TOP VIEW

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



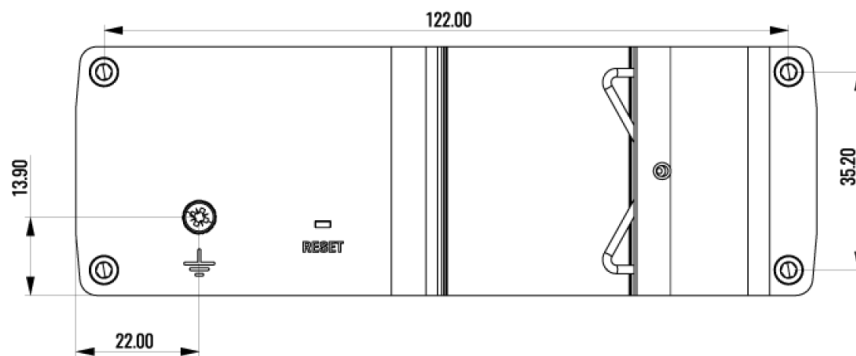
### RIGHT VIEW

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



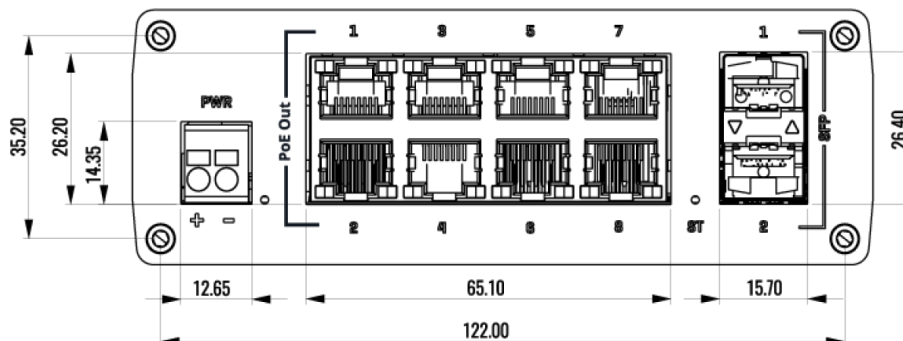
### REAR VIEW

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:

