



TSW212

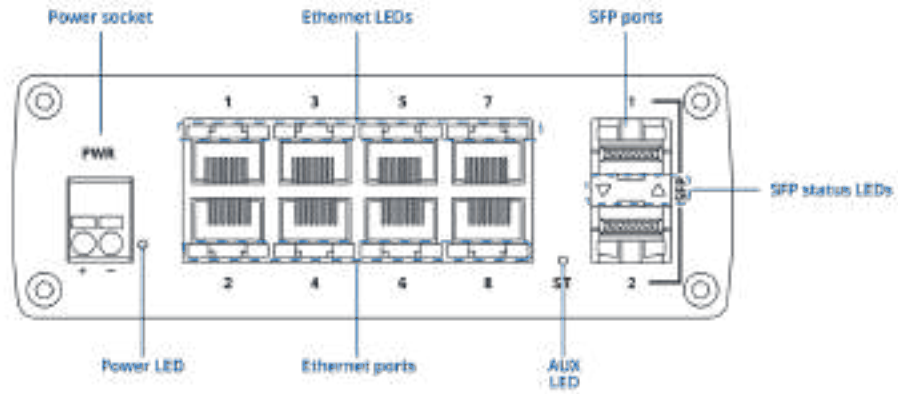
v1.1

Ensured by PROFINET

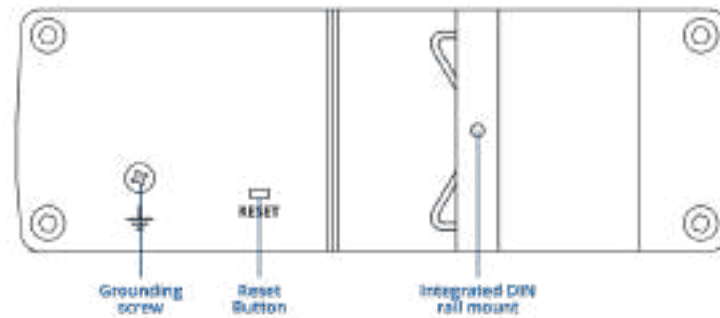


HARDWARE

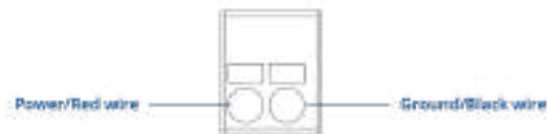
FRONT VIEW



BACK VIEW



POWER SOCKET PINOUT



RJ45 LED MEANING



SFP LED MEANING



FEATURES

Ethernet

| | |
|------------|--|
| ETH | Multi-layer managed 8 x ETH ports, 10/100/1000 Mbps supports auto MDI/MDIX crossover |
|------------|--|

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|--------------|---------------|
| Fibre | 2 x SFP ports |
|--------------|---------------|

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|------------------------------------|---|
| IEEE 802.3 series standards | 802.3i, 802.3u, 802.3ab, 802.3x, 802.3z |
|------------------------------------|---|

INDUSTRIAL PROTOCOLS

| | |
|-----------------|---|
| Profinet | Profinet Class B conformance (available with optional order code) |
|-----------------|---|

Services

| | |
|--------------------|-----|
| EtherNet/IP | Yes |
|--------------------|-----|

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|--------------------|-----|
| SNMP V2, V3 | Yes |
|--------------------|-----|

| | |
|-------------|-----|
| LLDP | Yes |
|-------------|-----|

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|---------------------------|--|
| 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 |
|------------|-----------------------------------|

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

Security

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| Authentication | PAM — preshared key, Radius & TACACS+, IP & login attempts block |
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QoS

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|------------|--|
| QOS | Port priority, DSCP priority, 802.1p priority, TOS |
|------------|--|

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|--------------------------|------------|
| Scheduling method | SP/WFQ/WRR |
|--------------------------|------------|

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|--------------------------|------------------------------|
| Bandwidth control | Rate limiting, storm control |
|--------------------------|------------------------------|

| | |
|-----------------------|--------------------|
| Traffic Shaper | Port-based shaping |
|-----------------------|--------------------|

Diagnostics

Tools Cable diagnostic, ping, traceroute, nslookup

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: <https://developers.teltonika-networks.com>

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

Power consumption Idle: < 2.5 W / Max: 6 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 | 615 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, WEEE, RoHS, REACH, SDPPI (POSTEL), JATE, Kenya, ICASA, Giteki, NBCT, ICASA, PROFINET, UL Safety |
|-------------------|---|

EMC Emissions & Immunity

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

Safety

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

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)

ORDERING

STANDARD PACKAGE*



- TSW212
- 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

| | | |
|-------------------------------------|-----|---------------------------------|
| TSW212 *****0 | N/A | TSW212000000 / Standard package |
| PROFINET disabled by default | | |
| TSW212 *****1 | N/A | TSW212000001 / Standard package |
| Profinet Class B conformance | | |

TSW212 SPATIAL MEASUREMENTS

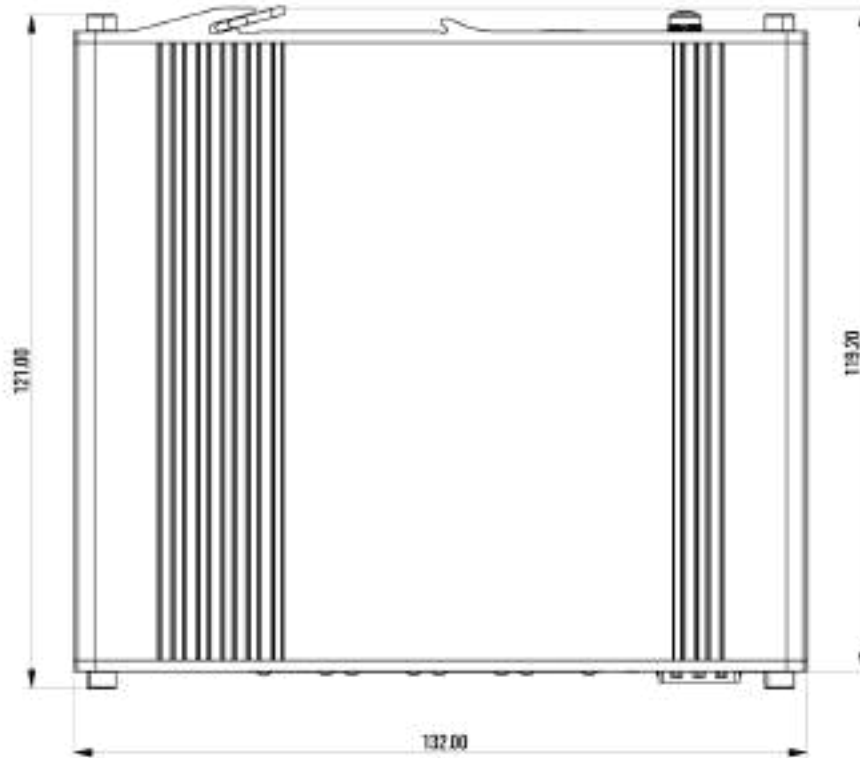
PHYSICAL SPECIFICATION

| | |
|------------------------------------|---------------------|
| Device housing (W x H x D)* | 132 x 44.2 x 122 mm |
| Box (W x H x D): | 136 x 47 x 125 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:

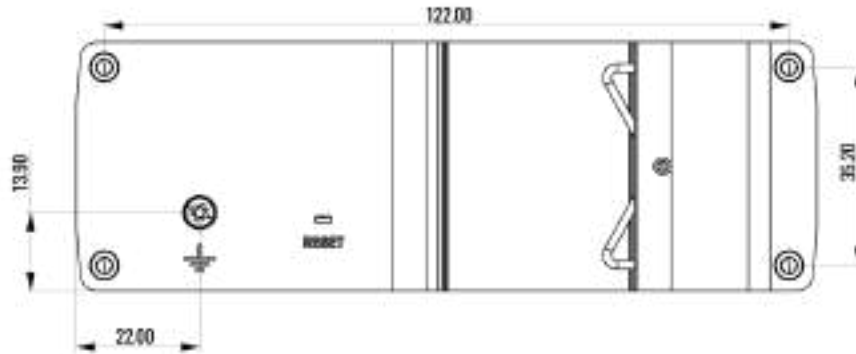
**RIGHT VIEW**

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



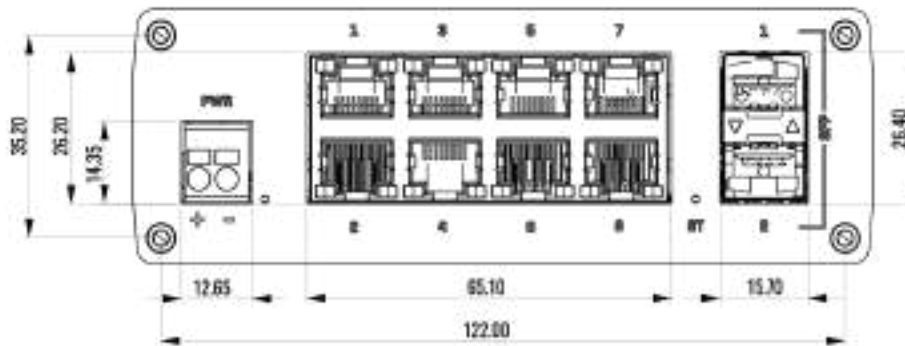
REAR VIEW

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:

