Distribué par :
ANTEOR / DIPM
2, rue Pablo Picasso
78114 Magny-les-Hameaux
France
Tél. : +33 (0)1 61 37 07 01
E-mail : contact@anteor.com

TELTONIKA

NTP001

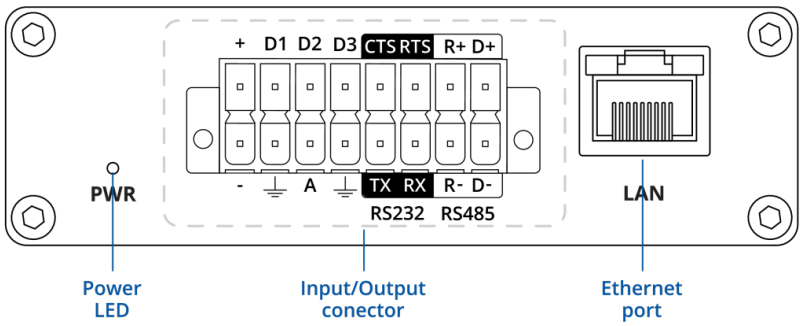
v1.0

Distribué par Antéor - www.anteor.com - Tél.: 01 61 37 07 00

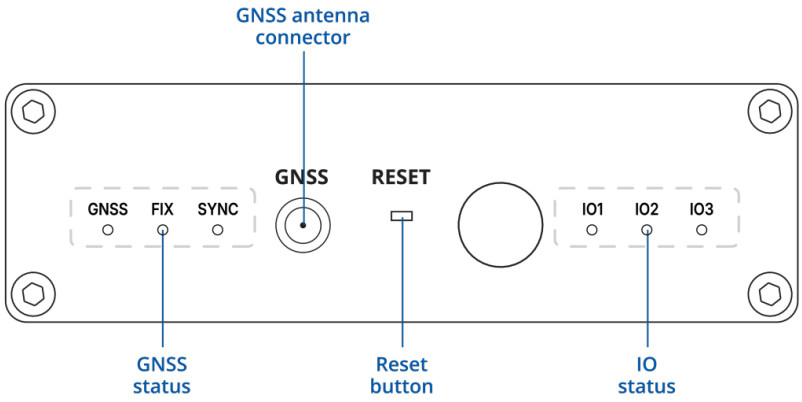
Copyright © 2025, UAB TELTONIKA NETWORKS. Specifications and information given in this document are subject to change by UAB TELTONIKA NETWORKS without prior notice.

HARDWARE

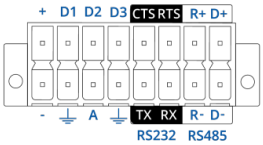
FRONT VIEW



BACK VIEW



16-PIN TERMINAL BLOCK



Distribué par Antéor - www.anteor.com - Tél.: 01 61 37 07 00

Copyright © 2025, UAB TELTONIKA NETWORKS. Specifications and information given in this document are subject to change by UAB TELTONIKA NETWORKS without prior notice.

FEATURES

Ethernet

LAN	1 x LAN port, 10/100 Mbps, compliance with IEEE 802.3, IEEE 802.3u, 802.3az standards, supports auto MDI/MDIX crossover

Network

Network protocols	TCP, UDP, IPv4, IPv6, ICMP, NTP, DNS, HTTP, HTTPS, SSL/TLS, ARP, SSH, DHCP, SNMP, MQTT
Connection monitoring	Ping Reboot, Wget Reboot, Periodic Reboot
Network topology	Visual representation of your network, showing which devices are connected to which other devices
DDNS	Supported >25 service providers, others can be configured manually

Security

Authentication	Pre-shared key, digital certificates, X.509 certificates, TACACS+, Internal & External RADIUS users authentication, IP & login attempts block, time-based login blocking, built-in random password generator
WEB filter	Blacklist for blocking out unwanted websites, Whitelist for specifying allowed sites only
Access control	Flexible access control of SSH, Web interface, CLI and Telnet
802.1x	Port-based network access control client

NTP

Supported modes	Server - Receive time from GPS and act as a NTP server to broadcast time for other devices (Stratum 1). Broadcast time through UDP or over Serial (RS232, RS485)
Daytime Protocol	TCP/UDP
Date over Serial	RS232/RS485
NTP	NTPv4, NTP authentication (MD5/SHA1), Unicast/Multicast/Broadcast mode
Protocol	NTP Stratum 1 Time Server (NTPv4)
NTP Accuracy	Ethernet NTP ±1ms overall
NTP Performance	>300 NTP requests per second (wire speed)
Synchronization Accuracy	LAN synchronization typically 1–10ms

Distribué par Antéor - www.anteor.com - Tél.: 01 61 37 07 00

Copyright © 2025, UAB TELTONIKA NETWORKS. Specifications and information given in this document are subject to change by UAB TELTONIKA NETWORKS without prior notice.

MODBUS

Supported modes	Server, Client
Supported connection types	RTU (RS232, RS485), TCP
Custom registers	MODBUS TCP custom register block requests, which read/write to a file inside the router, and can be used to extend MODBUS TCP Client functionality
Supported data formats	8-bit: INT, UINT; 16-bit: INT, UINT (MSB or LSB first); 32-bit: float, INT, UINT (ABCD (big-endian), DCBA (little-endian), CDAB, BADC), HEX, ASCII

MQTT Gateway

Modbus MQTT Gateway	Allows sending commands and receiving data from MODBUS Server through MQTT broker

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

Monitoring & Management

WEB UI	HTTP/HTTPS, status, configuration, FW update, CLI, troubleshoot, multiple event log servers, firmware update availability notifications, event log, system log, kernel log, Internet status
SSH	SSH (v1, v2)
SNMP	SNMP (v1, v2, v3), SNMP Trap, Brute force protection
JSON-RPC	Management API over HTTP/HTTPS
MODBUS	MODBUS TCP status/control

System Characteristics

CPU	Mediatek, 580 MHz, MIPS 24KEc
RAM	128 MB, DDR2
FLASH storage	16 MB, NOR Flash

Firmware / Configuration

WEB UI	Update FW from file, check FW on server, configuration profiles, configuration backup
Keep settings	Update FW without losing current configuration
Factory settings reset	A full factory reset restores all system settings, including the IP address, PIN, and user data to the default manufacturer's configuration

Distribué par Antéor - www.anteor.com - Tél.: 01 61 37 07 00

Copyright © 2025, UAB TELTONIKA NETWORKS. Specifications and information given in this document are subject to change by UAB TELTONIKA NETWORKS without prior notice.

FIRMWARE CUSTOMISATION

Operating system	RutOS (OpenWrt based Linux OS)
Supported languages	Busybox shell (ash), Lua 5.1, C, C++
Development tools	SDK package with build environment provided
GPL customization	You can create your own custom, branded firmware and web page application by changing colours, logos, and other elements in our firmware to fit your or your clients' needs

Location Tracking

GNSS	GPS, GLONASS, BeiDou, Galileo and QZSS
Acquisition Sensitivity	Acquisition Sensitivity -146 dBm, Reacquisition Sensitivity -157 dBm, Tracking Sensitivity -157 dBm
Accuracy	CEP-50 open sky 2.5 m
Time Source	GPS 1575.42 ±1.023 MHz, GLONASS 1597.5–1605.8 MHz, Galileo 1575.42 ±2.046 MHz, BDS 1561.098 ±2.046 MHz
Startup	Cold GPS acquisition in 120 seconds

Serial

RS232	Terminal block connector: TX, RX, RTS, CTS
RS485	Terminal block connector: D+, D-, R+, R- (2 or 4 wire interface)

Input / Output

Input	3 x Digital Input, 0 - 6 V detected as logic low, 8 - 30 V detected as logic high
Output	3 x Digital Output, Open collector output, max output 30 V, 300 mA

Power

Connector	2-pin in 16-pin industrial terminal block
Input voltage range	9 - 30 VDC, Overvoltage protection, Reverse polarity protection, Surge protection +/- 1kV 50 uS Max
Power consumption	Idle: 2 W, Max: 3.5 W

Distribué par Antéor - www.anteor.com - Tél.: 01 61 37 07 00

Copyright © 2025, UAB TELTONIKA NETWORKS. Specifications and information given in this document are subject to change by UAB TELTONIKA NETWORKS without prior notice.

Physical Interfaces

Ethernet	1 x RJ45 ports, 10/100 Mbps
I/O's	3 x Configurable I/O, 1 x Analog input in 16-pin terminal block
Status LEDs	1 x Power, 2x GNSS status LEDs, 1x NTP Server status LED, 3 x IO status LEDs
Power	1 x 16-pin terminal block
Antennas	1 x SMA for GNSS
RS232	4-pin in 16-pin terminal block (TX, RX, RTS, CTS)
RS485	4-pin in 16-pin terminal block (D+, D-, R+, R-)
Reset	Reboot/User default reset/Factory reset button

Physical Specification

Casing material	Anodized aluminum housing and panels
Dimensions (W x H x D)	82.6 x 25 x 83 mm
Weight	180 g
Mounting options	DIN rail, wall mount, flat surface (all require additional kit)

Operating Environment

Operating temperature	-40 °C to 75 °C
Operating humidity	10% to 90% non-condensing
Ingress Protection Rating	IP30

Regulatory & Type Approvals

Regulatory	CE, UKCA, CB, UCRF, EAC, WEEE

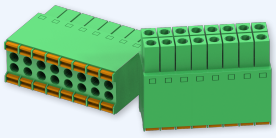
Distribué par Antéor - www.anteor.com - Tél.: 01 61 37 07 00

Copyright © 2025, UAB TELTONIKA NETWORKS. Specifications and information given in this document are subject to change by UAB TELTONIKA NETWORKS without prior notice.

ORDERING

STANDARD PACKAGE*

NTP001



2X8PIN CONNECTOR

QSG (QUICK START GUIDE)

- NTP001 GNSS NTP Time Server
- 16-pin terminal block
- 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

NTP001 **0*****	N/A	NTP001000000 / Standard package

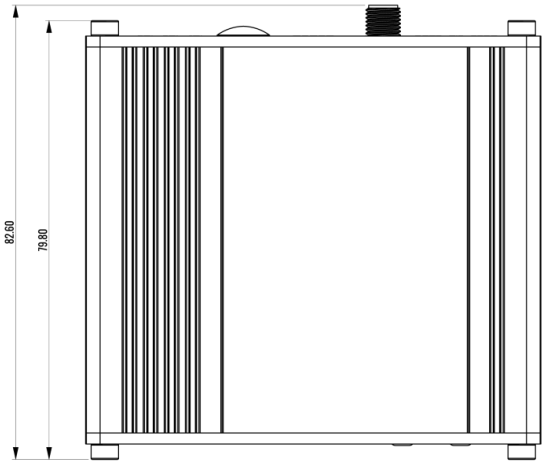
NTP001 SPATIAL MEASUREMENTS

Distribué par Antéor - www.anteor.com - Tél.: 01 61 37 07 00

Copyright © 2025, UAB TELTONIKA NETWORKS. Specifications and information given in this document are subject to change by UAB TELTONIKA NETWORKS without prior notice.

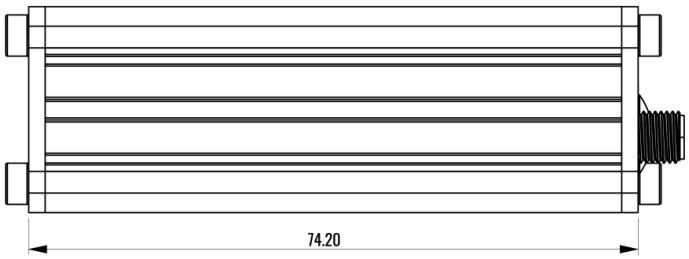
TOP VIEW

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



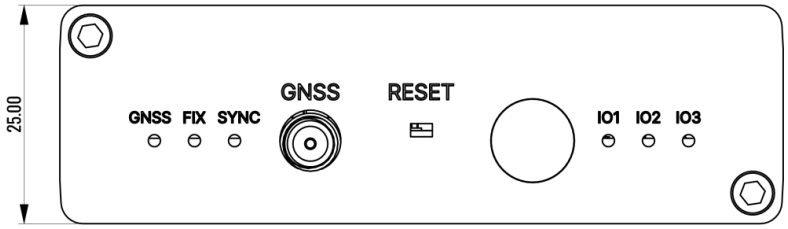
RIGHT VIEW

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:

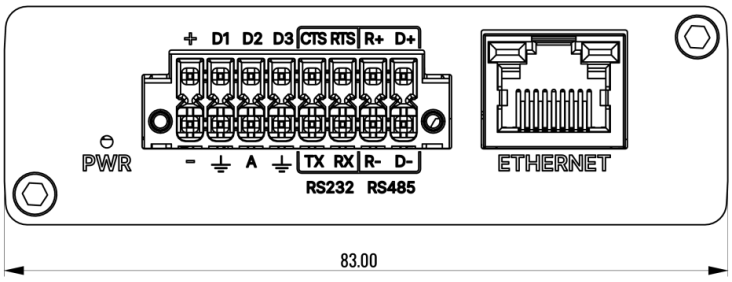


Distribué par Antéor - www.anteor.com - Tél.: 01 61 37 07 00

Copyright © 2025, UAB TELTONIKA NETWORKS. Specifications and information given in this document are subject to change by UAB TELTONIKA NETWORKS without prior notice.

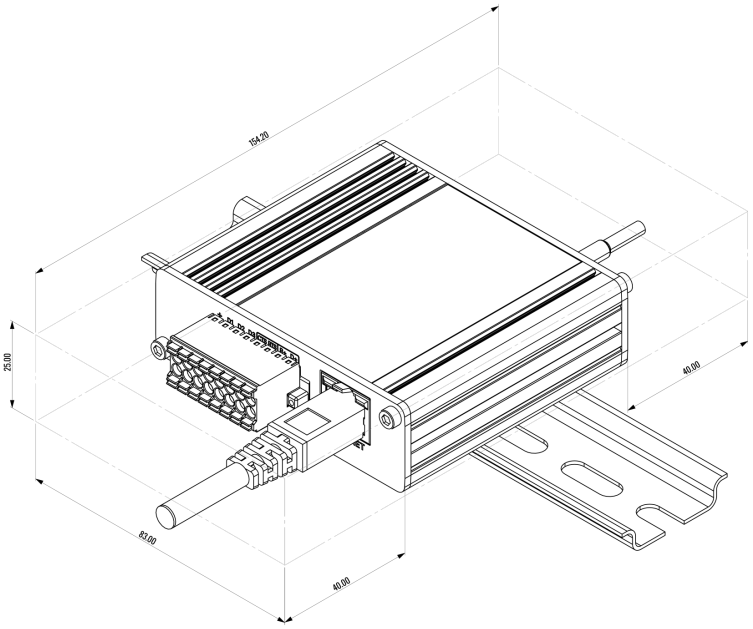
FRONT VIEW

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:



Distribué par Antéor - www.anteor.com - Tél.: 01 61 37 07 00

Copyright © 2025, UAB TELTONIKA NETWORKS. Specifications and information given in this document are subject to change by UAB TELTONIKA NETWORKS without prior notice.