

TRB160 Configuration Examples

This page contains various configuration guides for the TRB140 router. Unlike the articles in the [TRB140 Manual](#), which provide more general knowledge on all of the router's features and functions, these guides are more in-depth and are usually focused on specific configuration scenarios with extensive explanations. While most of the guides apply to both Windows and Linux Operating Systems, some are exclusive to one OS and others aren't OS-specific in any way and apply to any system.



Contents

- [1 Router control and monitoring](#)
- [2 VPN](#)
- [3 IoT platforms](#)
- [4 DLMS](#)
- [5 PC](#)
 - [5.1 Windows](#)
 - [5.2 Linux](#)
- [6 DDNS](#)
- [7 System upgrades](#)
- [8 DNP3](#)
- [9 SNMP](#)
- [10 Camera](#)
- [11 WAN](#)
- [12 LAN](#)
- [13 DHCP](#)
- [14 USB](#)
- [15 Mobile](#)
- [16 Hardware application](#)

Router control and monitoring

- [Configuration Backup](#)
- [Command line interfaces](#)
- [MQTT \(Linux guide\)](#)
- [UCI command usage](#)
- [Crontabs](#)
- [SSH RSA key authentication \(Linux\)](#)
- [SSH RSA key authentication \(Windows\)](#)
- [Monitoring with ThingsBoard IoT Platform](#)
- [Monitoring via JSON-RPC windows](#)
- [Monitoring via JSON-RPC linux](#)
- [Monitoring via Zabbix](#)
- [Firewall traffic rules](#)

- [Removing of HTTPS security warning](#)
- [MQTT broker bridge](#)
- [OPC UA Configuration Example](#)
- [Setting up external Radius server for RUTOS authentication](#)
- [SSHFS](#)

VPN

- [DMVPN configuration example](#)
- [DMVPN with OSPF configuration example](#)
- [OpenVPN configuration example](#)
- [IPsec configuration example](#)
- [ZeroTier One VPN configuration example](#)
- [ZeroTier configuration example](#)
- [L2TP configuration example](#)
- [Overlapping subnets with IPsec solution](#)
- [GRE over IPsec Tunnel](#)
- [IPsec_Tunnel_with_X.509_Authentication_configuration_example](#)
- [L2TP over IPsec RutOS](#)
- [Fortigate IPsec default route configuration example](#)
- [Fortigate IPsec site to site configuration example](#)
- [Cisco IPsec](#)
- [Cisco GRE](#)
- [Setting up a GRE over IPsec tunnel between Teltonika Networks and Cisco devices](#)
- [Mikrotik GRE over IPsec Tunnel](#)
- [Mikrotik Sstp](#)
- [Mikrotik OpenVPN](#)
- [Mikrotik L2TP over IPsec](#)
- [OpenVPN Access Server](#)
- [OpenVPN Access control](#)
- [Setting up an IPsec tunnel between RUT and Android phone](#)
- [Tinc VPN configuration examples](#)
- [L2TP over IPsec VPN to a PC configuration example](#)
- [OpenVPN traffic split](#)
- [Default IPsec route configuration between Teltonika Networks devices](#)
- [OpenVPN over Stunnel](#)
- [L2 LAN bridging over internet using L2TPv2+EoIP](#)
- [1NCE Configuration](#)
- [ExpressVPN configuration example](#)
- [NordVPN configuration example](#)

IoT platforms

- [Azure IoT Hub Cloud Connection](#)
- [Cumulocity](#)
- [da³vid](#)
- [AWS MQTT cloud connection](#)
- [BAG Tower](#)
- [N3uron Notifier](#)

DLMS

- [DLMS client configuration example](#)

PC

Windows

- [Static IP address setup \(Windows 10\)](#)
- [OpenVPN client on Windows](#)
- [OpenVPN server on Windows](#)
- [TLS certificates \(Windows\)](#)
- [Wake on LAN PC setup \(Windows\)](#)

Linux

- [Static IP address setup \(Ubuntu 16\)](#)
- [FTP server \(Ubuntu 16\)](#)
- [OpenVPN client on Linux](#)
- [TLS certificates \(Ubuntu 18\)](#)

DDNS

- [Noip.com DDNS configuration example](#)
- [Dynu.com DDNS configuration example](#)

System upgrades

- [Firmware upgrade via command line](#)

DNP3

- [DNP3 TCP server configuration example](#)

SNMP

- [SNMP configuration example](#)

Camera

- [Camera access from VPN RUTOS](#)
- [Remote camera access](#)
- [Camera access from smartphone](#)

WAN

- [Setting up WAN as LAN](#)
- [Load Balancing Rules/Policies examples](#)
- [OSPF Route Failover](#)
- [VRRP configuration example](#)
- [Starlink Failover Configuration](#)

LAN

- [Setting up a PPPoE between Teltonika Networks router and a Mikrotik device](#)
- [VLAN Inter-Zone accessibility control configuration example](#)
- [LAN as WAN configuration example](#)
- [VLAN: Tag-Based configuration example](#)
- [Blocking Internet access for LAN clients](#)
- [VLAN Set Up configuration example](#)

DHCP

- [DHCP Relay configuration example](#)
- [DHCP Relay over L2TPv3](#)

USB

- [How to set up a USB printer \(Windows\)](#)

Mobile

- [AT Commands](#)
- [Locking Devices to a Mobile Cell](#)
- [GSMCTL commands](#)
- [Multi-APN](#)
- [eSIM configuration example](#)
- [SMS forwarding configuration example](#)

Hardware application

- [Ignition detection solution](#)
- [SMS and Email alerts Triggered by BAT120](#)