

USER MANUAL

TOSIBOX® 350

TOSIBOX® 375

Version 3.4

The logo for TOSIBOX, featuring the word in a bold, sans-serif font. The letters 'TOSI' are orange, and 'BOX' is white. The letters are closely spaced and have a slight shadow effect.

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Congratulations for choosing TOSIBOX® solution! It consists of modular components that offer unlimited expandability and flexibility. All products are compatible with each other as well as internet connection, operator, and device agnostic. The system works both in internal and external networks.

- TOSIBOX® Key is a client used to access the network.
- TOSIBOX® Node is a router with firewall sharing access to devices.

In physical matching, the Key is inserted to the Lock's USB port. The devices exchange their security certificates (and public keys). This trust relationship is the basis for all communication happening afterwards.

TOSIBOX creates direct VPN tunnel between the physical devices. Only trusted devices can access the network.

TOSIBOX is globally audited, patented and performs at the highest security levels in the industry. The technology is based on two-factor authentication, automatic security updates and the latest encryption technology.

TECHNICAL SUPPORT

support@tosibox.com

GLOBAL

+358 10 57 30533

Business hours:

**from 8 am till 5 pm Mon – Fri
(UTC+2)**

TOSIBOX GLOBAL SUPPORT

<https://helpdesk.tosibox.com>

1. REGULATORY INFORMATION

1.1 TOSIBOX® NODE INTENDED USE

The Lock is used for controlling other devices remotely over the Internet via a VPN connection. To be installed into a DIN rail, inside a cabinet with the controlled devices. Alternatively, the Lock may be standing on its rubber feet on a table or a shelf. The product conformity with the requirements is guaranteed only when using the antennas supplied with the product. The use of other antennas will void the conformity and is not allowed.

Lock 150: Office and residential environment

 Norway: Use of this radio equipment (Wi-Fi) is not allowed in the geographical area within a radius of 20 km from the centre of Ny-Ålesund, Svalbard, Norway.

Lock 500: Office, residential and light industrial environment

 Norway: Use of this radio equipment (Wi-Fi) is not allowed in the geographical area within a radius of 20 km from the centre of Ny-Ålesund, Svalbard, Norway.

1.2 IMPORTANT NOTICE FOR WIRELESS OPERATION OF TOSIBOX® NODE

Because of the nature of wireless communications, transmission and reception of data can never be guaranteed. Data may be delayed, corrupted (i.e., have errors) or be totally lost. Although significant delays or losses of data are rare when wireless devices are used in a normal manner with a well-constructed network, TOSIBOX® Node with cellular modem should not be used in situations where failure to transmit or receive data could result in damage of any kind to the user or any other party, including but not limited to personal injury, death, or loss of property.

Tosibox Oy and its affiliates accept no responsibility for damages of any kind resulting from delays or errors in data transmitted or received using TOSIBOX® Node with cellular modem, or for failure of the TOSIBOX® Node with cellular modem to transmit or receive such data.

1.3 SAFETY AND HAZARDS

At least 20 cm separation distance between the antennas and persons must be maintained at all times.

Do not operate your Node with internal or external cellular modem:

- In areas where blasting is in progress
- Where explosive atmospheres may be present including refuelling points, fuel depots, and chemical plants
- Near medical equipment, life support equipment, or any equipment which may be susceptible to any form of radio interference. In such areas, the Node and the cellular modem **MUST BE POWERED OFF**. Otherwise, the cellular modem can transmit signals that could interfere with this equipment.
- In an aircraft, the Node and the cellular modem **MUST BE POWERED OFF**. Otherwise, the Node and the cellular modem can transmit signals that could interfere with various onboard systems and may be dangerous to the operation of the aircraft or disrupt the cellular network. Use of a cellular phone in an aircraft is illegal in some jurisdictions. Failure to observe this instruction may lead to suspension or denial of cellular telephone services to the offender, or legal action or both. Some airlines may permit the use of cellular phones while the aircraft is on the ground and the door is open. The Node and the cellular modem may be used normally at this time.

TECHNICAL DATA

TOSIBOX® 350

Ports

- 1 x RJ-45 WAN connection, 10/100 Mbps, auto-negotiation (MDI / MDI-X)
- 4 x RJ-45 LAN connection, 10/100 Mbps, auto-negotiation (MDI / MDI-X)
- 1 x USB 2.0, type A

WAN connection features

- 3-way WAN priority
- Proxy server support
- WAN access with static addressing or DHCP
- Network Time Protocol (NTP) server
- Automatic LAN network discovery
- LAN access with mixed static addressing and DHCP server
- Static routes
- Works in all Internet connections (operator independent)
- Firewall friendly
- Works with dynamic, static and private IP addresses
- Built-in firewall, NAT
- Up to 50 concurrent VPN connections
- Aggregate VPN throughput up to 10 Mbps
- Single VPN throughput up to 10 Mbps

Physical properties

- 145 mm x 114 mm x 45 mm / 5.71" x 4.49" x 1.77" (W x H x L)
- Protection class IP30
- Weight 630 g / 1.39 lbs (net weight article)
- Storage temperature -35 °C ... +75 °C / -31 °F ... +167 °F
- Operating temperature -35 °C ... +75 °C / -31 °F ... +167 °F
- Power supply operating temperature -10 °C ... +40 °C / 14°F ... +104 °F
- Power storage temperature -20 °C ... +70 °C / -4°F ... +158 °F

Powering requirements

- 5-35V DC, reverse polarity protection, voltage surge/transient protection

Antenna installation

- Wireless LAN antenna interface on the device is a RP-SMA male antenna interface (marked as 'WIFI'), screw the WIFI antenna on the interface, make sure it's fastened enough to ensure the signal quality.

TOSIBOX® 375

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- Operating temperature -40 °C ... +80 °C / -40 °F ... +176 °F
- Power supply operating temperature 0 °C ... +40 °C / 32°F ... +104 °F
- Power storage temperature -20 °C ... +80 °C / -4°F ... +176 °F

Powering requirements

- 5-35V DC, reverse polarity protection, voltage surge/transient protection

10. LIMITED WARRANTY

Subject to the exclusions set forth below, Tosibox will repair or replace, at its option without charge, any TOSIBOX® product which fails due to a defect in material or workmanship within 24 months following the initial consumer purchase.

This warranty does not apply to water damage, abuse or misuse of unauthorized accessories, unauthorized service or modification or altered products.

This warranty does not include the cost of labor for removal or re-installation of the product.

ANY IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL BE LIMITED AS SET FORTH HEREIN AND TO THE DURATION OF THE LIMITED WARRANTY, OTHERWISE THE REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS EXPRESS LIMITED WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER AND IS PROVIDED IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. IN NO EVENT SHALL TOSIBOX BE LIABLE, WHETHER IN CONTRACT OR TORT (INCLUDING BUT NOT LIMITED TO NEGLIGENCE, GROSS NEGLIGENCE, BODILY INJURY, PROPERTY DAMAGE AND DEATH) FOR DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE PRODUCT OR ACCESSORY, OR FOR ANY INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES OF ANY KIND, OR LOSS OF REVENUE OR PROFITS, LOSS OF BUSINESS, LOSS OF INFORMATION OR DATA OR OTHER FINANCIAL LOSS ARISING OUT OF OR IN CONNECTION WITH THE ABILITY OR INABILITY TO USE THE PRODUCTS OR ACCESSORIES TO THE FULL EXTENT THESE DAMAGES MAY BE DISCLAIMED BY LAW.

The complete information about Tosibox Terms and Conditions is available at:

<https://www.tosibox.com/regulatory-information>

For Product Purchased in the USA:

Performance of any obligation under this warranty may be obtained by returning the warranted product, prepaid freight, along with proof of purchase to:

Tosibox, Inc.
11770 Haynes Bridge Rd
Suite 205-101
Alpharetta, GA 30004

This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

Note: The above warranty applies only to merchandise purchased in the United States of America or any of the territories or possessions thereof, or from a U.S. Military exchange.

For Product Purchased in Canada:

Performance of any obligation under this warranty may be obtained by returning the warranted product, along with proof of purchase, to your place of purchase in Canada.

This warranty gives you specified legal rights. Additional warranty rights may be provided by law in some within Canada

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Elektroniikkatie 2 A, 7th floor
90590 OULU, FINLANDE

TOSIBOX® 350

EU DECLARATION OF CONFORMITY

Hereby, Tosibox Oy declares that the radio equipment type 350 is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following Internet address:

<https://www.tosibox.com/tosibox-for-sites>

UL DECLARATION OF CONFORMITY

This device is UL listed in USA and Canada with UL file number E497243.



FEDERAL COMMUNICATION COMMISSION INTERFERENCE STATEMENT

350 FCC ID: 2AHCNNODE350

This radio device has been tested to operate with the external antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

350: Wi-Fi communication antenna, 50 ohm, max peak gain 4.69 dBi.

FEDERAL COMMUNICATION COMMISSION (FCC) STATEMENT

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

TOSIBOX® 375

EU DECLARATION OF CONFORMITY

Hereby, Tosibox Oy declares that the radio equipment type 375 is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following Internet address:

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UL DECLARATION OF CONFORMITY

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