



Advantages of TOSIBOX



Simple

Build and manage secure OT infrastructure in minutes



Secure

Tested & audited security



Modular

Unlimited expandability and flexibility



Timeless

Deals with legacy and future systems



Unique

Globally patented point-to-point connection

TOSIBOX® Lock 500

The next generation Plug & Go[™] connectivity device

TOSIBOX® Lock 500 is a high-end connectivity device bringing unprecedented possibilities for customers to manage their operations and to build new IoT solutions. The Lock 500 is ideal for demanding industrial environments and opens up new opportunities in security and office networking sectors.

The Lock 500 is compatible with all existing TOSIBOX® products. Modularity of the products enables easy and fast extension of networks.

Main features

High performance

- Massive VPN throughput for data consuming applications, end-to-end encryption between TOSIBOX® devices
- Up to 50 concurrent VPN connections

Reliability

- · Integrated WiFi as connectivity method or access point for wireless devices on site.
- · Built-in LTE modem (optional), with three modem variants covering most of the globe no external modem needed
- · Dual-SIM slots for operator redundancy allows for even more reliable connectivity
- TosiOnline[™] automatic reconnection of dropped connections

Industrial design

- 2/2 x Digital I/O for controlling and monitoring of Lock status and sending SMS in I/O events
- · Robust and fanless enclosure, integrated DIN rail bracket and industrial screw-on DC power connector





TOSIBOX® Lock 500 Technical Data

Product codes:

TBL5, TBL5PS, TBL5iA, TBL5iAPS, TBL5iB, TBL5iBPS, TBL5iC, TBL5iCPS, TBL5iD, TBL5iDPS

Ports

- 1 x USB 2.0, type A
- 1 x RJ-45 WAN connection, 10/100 Mb/s, auto-negotiation (MDI / MDI-X)
- 3 x RJ-45 LAN connection, 10/100 Mb/s, auto-negotiation (MDI / MDI-X)
- LAN3 can be assigned as Service connection, 10/100 Mb/s, auto-negotiation (MDI / MDI-X)
- Ethernet port isolation: 1500 Vrms 1 minute (when device frame connected to system ground potential)

Connections

- 12-48V DC (+/-20%), reverse polarity protected
- Device frame connector
- 2 x WiFi antenna connector, RP-SMA Female
- (TBL5i*) 2 x LTE antenna connectors, SMA Female
- Lower LTE connector for main antenna
- · Upper LTE connector for supporting antenna
- 2 x Digital Input, 2 x Digital Output, 24V DC out
- DIN rail attachment (back)
- Maximum power consumption 10W

WAN connection features

- Independent of operating systems
- Works in all Internet connections (operator independent)
- Supports HTTP proxy servers with and without authentication
- Firewall friendly
- Works with dynamic, static and private IP addresses
- Built-in firewall, NAT
- Up to 50 concurrent VPN connections
- VPN throughput up to 70 Mbit/s

Mobile connection features

- Supported External USB modem: TOSIBOX® 4G modem (TB4GM2EU, TB4GM2AU).
- \bullet TosiOnline $^{\text{TM}}$ Automatic network recovery that recovers from most mobile operator and modem problems

TBL5iA*

- Region: EMEA
- LTE Cat-6
- Up to 300 Mbps DL, 50 Mbps UL
- Frequency Bands (4G LTE): B1, B2, B3, B4, B5, B7, B12, B13, B20, B25, B26, B29, B41
- Dual SIM

TBL5iB*

- Region: APAC
- LTE Cat-6
- Up to 300 Mbps DL, 50 Mbps UL
- Frequency Bands (4G LTE): B1, B3, B5, B7, B8, B18, B19, B21, B28, B38, B39, B40, B41
- Dual SIM

TBL5iC*

- Region: US/CAN
- LTE Cat-6
- Up to 300 Mbps DL, 50 Mbps UL
- Frequency Bands (4G LTE): B1, B2, B3, B4, B5, B7, B12, B13, B20, B25, B26, B29, B41
- Dual SIM

TBL5iD*

- Region: US/CAN
- CBRS
- LTE Cat12 / carrier aggregation
- Up to 600 Mbps DL, 100 Mbps UL
- Frequency Bands (4G LTE): B1, B2, B3, B4, B7, B8, B9, B12, B13, B14, B18, B19, B20, B5, B42, B43, B26, B29, B41, B30, B66, B32, B46, B48
- Dual SIM

WLAN

- IEEE 802.11 b/g/n, max. 150 Mbps
- Encryptions WEP, WPA-PSK, WPA2-PSK, WPA-PSK/WPA2-PSK mixed mode
- Frequency 2.412 2.462 GHz, 11 channels
- Output power 20 dBm max

Included accessories

- RJ-45 Cat5e Ethernet cable
- 2 x WiFi antennas, 2 dBi
- I/O connector plug
- Power connector plug
 - TBL5*PS: AC adapter Input 100 240 V AC, frequency 47 63 Hz, Output 12.0 V, 1.6 A, max 19.2 W. EU, UK, AU and US power socket
 - TBL5*PS: DC feed cable
 - TBL5iA*: EMEA Modem
 - TBL5iB*: APAC Modem
 - TBL5iC*: US/CAN modem
 - TBL5i*: 2 x LTE antennas

I/O specifications

- 2 x digital inputs, galvanic isolation, current limited to ←5mA, Voltage 0 - 32V nom. →12V is interpreted as '1', 0-5V is '0'
- 2 x digital outputs, 24V DC, 50 mA current shared by the outputs and 24V DC out
- 1 x 24V DC out, 50 mA current shared by 24V DC out, output 1 and output 2
- Software Configurable I/O state

Physical properties

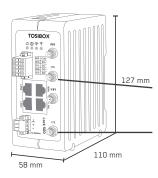
- 110 mm x 58 mm x 127 mm / 4.33" x 2.28" x 5.0" (L x W x H)
- Storage temperature -40 $^{\circ}$ C ... +70 $^{\circ}$ C / -40 $^{\circ}$ F ... +158 $^{\circ}$ F
- Protection class IP20

TBI 5*

- Weight 495 g / 1.09 lbs (net weight article)
- Operating temperature -20 $^{\circ}$ C ... +60 $^{\circ}$ C / -4 $^{\circ}$ F ... +140 $^{\circ}$ F

TBL5i*

- Weight 505 g / 1.11 lbs (net weight article)
- Operating temperature -20 °C ... +60 °C / -4 °F ... +140 °F



(TBL5i*) 2 x LTE antenna connectors, SMA Female

Upper LTE connector for supporting antenna

Lower LTE connector for main antenna

Tosibox Oy

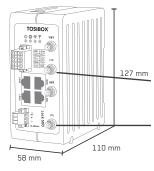
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TOSIBOX® Lock 500 Technical Data



(TBL5i*) 2 x LTE antenna connectors, SMA Female

Upper LTE connector for supporting antenna

Lower LTE connector for main antenna

1.



* LAN3 Port can be configured as a Service Port

- 1. SIM card slot
- 2. USB Port for matching and USB Modem
- 3. Reset button for Service
 - Port activation only
- 4. Digital I/O
- -Connection

Ethernet Connections:

- 5. LAN2 Port
- 6. WAN Port
- 7. LAN3 Port*
- 8. LAN1 Port
- 9. Power Connection
- 10. WiFi Antenna Port 1
- 11. LTE Antenna Port 2 (Lock 500i only)
- 12. WiFi Antenna Port 2



LED indicators:

- 14. Power
- 15. Internet
- 16. WiFi
- 17. LTE

Ethernet Port Leds:

- 18. LAN2
- 19. WAN
- 20. LAN3
- 21. LAN1

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