

TOSIBOX® solution built for your needs



Simple Build and manage secure IoT infrastructure in minutes

- Easy configuration-free Plug & Go™ implementation without special IT skills
- Create and manage access groups: Limit access, add new users and objects simply by drag and drop.
- IT/OT convergence solved
- "Self-healing" network: TosiOnline™ automatically reconnects dropped connections.



Timeless Deals with legacy and future systems

- Technology makes the legacy hardware and future systems compatible.
- Internet connection, operator, and device agnostic
- Works both in internal and external networks.



Secure Tested & audited security

- Technology based on two-factor authentication, automatic security updates and latest encryption technology
- One TOSIBOX® Lock device protects all devices behind it.



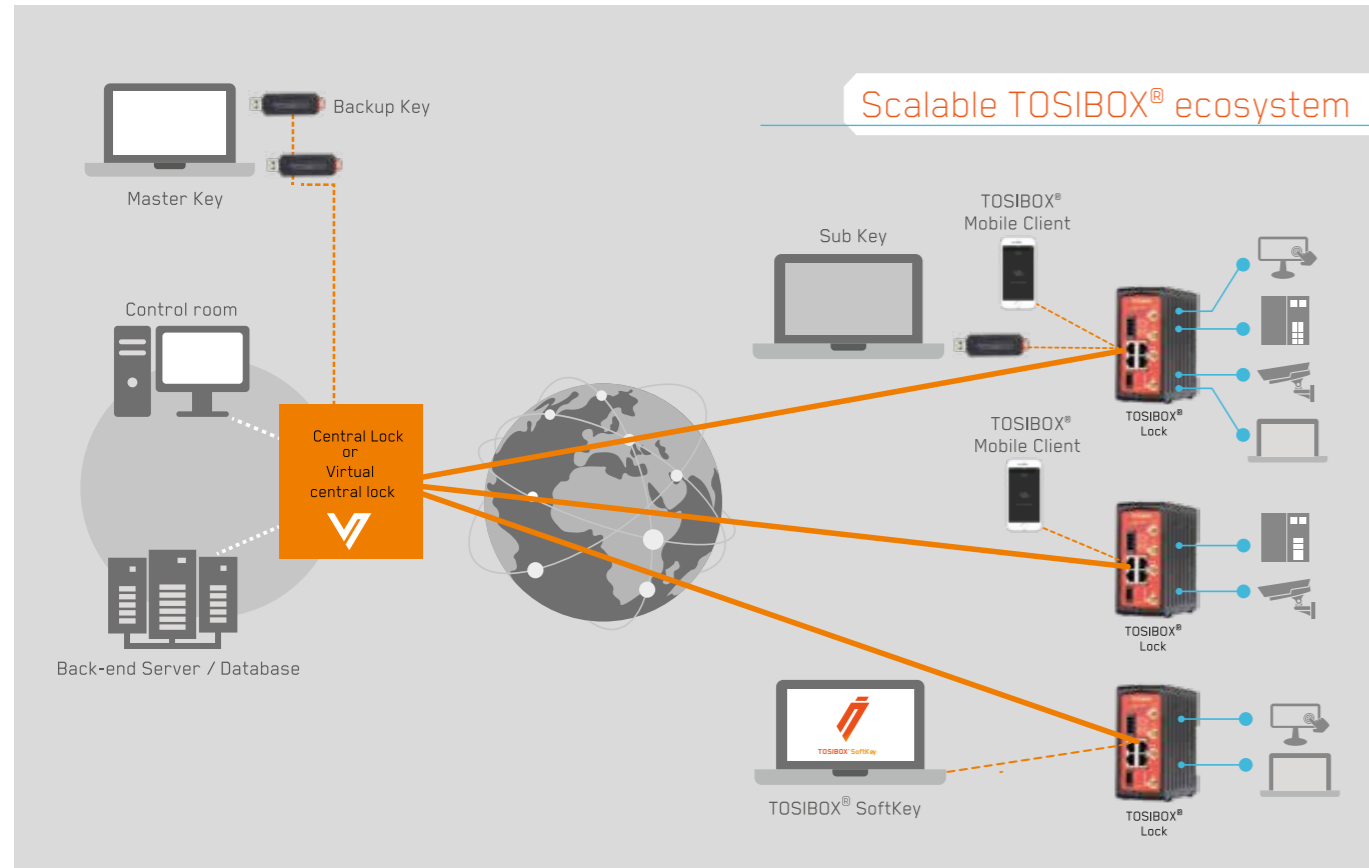
Modular Unlimited expandability and flexibility

- Easily extend the network when you need to.
- Grow from one object to thousands, without changing the system.



Unique Globally patented point-to-point connection

- Point-to-point data flow: data streams directly between two modules, no cloud
- Two-way communication offers the benefits of IoT plus remote maintenance with one technology.
- Globally awarded solution



TOSIBOX®

tosibox.com

"If a tourist can fly across oceans without knowing anything about airplanes, why can't people enjoy the benefits of technology without having an IT degree?"

Veikko Ylimartimo, Tosibox founder

We have taken connectivity and made it simple. Our people, technology and software have created a new standard for secure IoT connectivity, remote maintenance and network management. The award-winning TOSIBOX® products are manufactured in Finland and used worldwide.

Tosibox Oy

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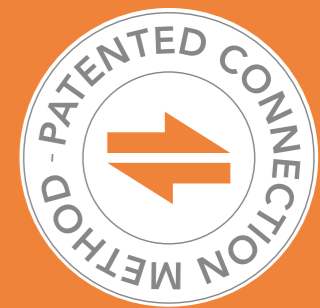
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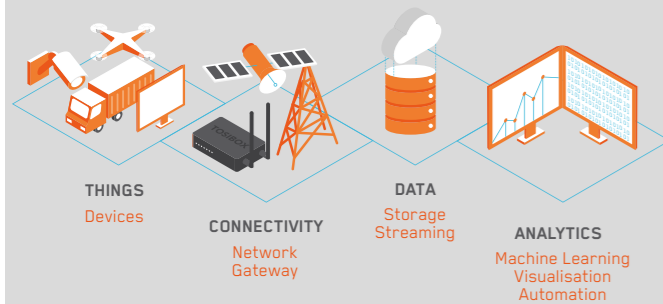
Simplifying IoT



Secure IoT connectivity, remote maintenance and network management

The anatomy of IoT solutions

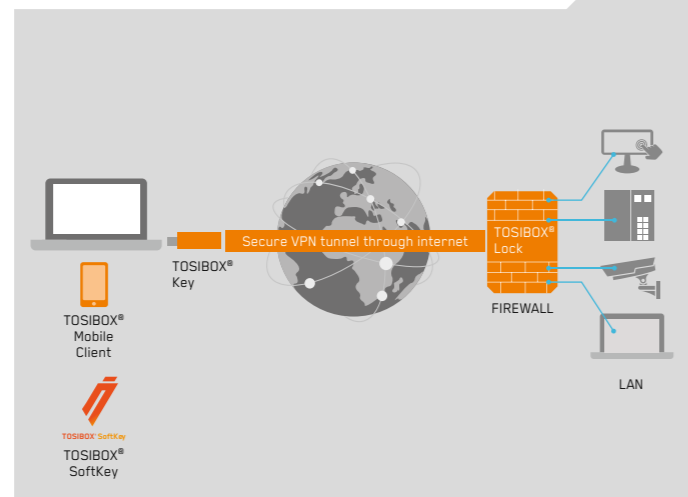
4 Pillars of a Connected Enterprise



We believe that success in the era of the Internet of Things is simply a matter of connections, and connectivity is the core of IoT. Today the need for reliable connectivity is greater than ever: By 2020 more than half of major new business processes and systems will incorporate some elements of IoT.

Secure connectivity is essential for remote access, remote maintenance, continuous monitoring, real-time data collection and data logging. TOSIBOX® helps you to harness IoT for your business.

How TOSIBOX® Plug & Go™ works



With TOSIBOX® you can create a fully secure remote connection within minutes, and without special IT skills. You can build and manage networks and IoT infrastructures with the easily expandable and timeless solution.

We offer centralized real-time management of your devices and access control that help you generate cost savings. With TOSIBOX® adding new devices or users into the network is simply drag and drop, whereas with old-fashioned IT networks completing the same task takes days or weeks.

Modular TOSIBOX® technology



TOSIBOX® solution consists of modular components that offer unlimited expandability and flexibility. All products are compatible with each other. The technology can also be integrated into OEM devices.

- TOSIBOX® Key is a dongle used to access the network.
- TOSIBOX® Lock is an industry router sharing access to devices.
- TOSIBOX® Virtual Central Lock is the platform for network and access rights management.

Functions	TOSIBOX® Lock 100	TOSIBOX® Lock 200	TOSIBOX® Lock 500
TOSIBOX® Plug & Go™ Technology	Yes	Yes	Yes
Mounting options	DIN rail mounting at bottom	DIN rail mounting on three sides	DIN rail attachment at back
Power input	12 - 24V DC, ±25%	8 - 27 V DC ±10%, with cable anchor	12-48V DC (+/-20%), reverse polarity protected
3G / 4G USB modem support	Yes	Yes	Internal LTE (option)
WAN port	10/100 Mbit/s	10/100 Mbit/s	10/100 Mbit/s
LAN ports	3 x 10/100 Mbit/s, bridged	3 x 10/100 Mbit/s, bridged	3 x 10/100 Mbit/s
VPN throughput	Up to 6 Mbit/s	Up to 15 Mbit/s	Up to 70 Mbit/s
VPN encryption	Blowfish 128 bit CBC, AES 128/192/256 bit CBC	Blowfish 128 bit CBC, AES 128/192/256 bit CBC	Blowfish 128 bit CBC, AES 128/192/256 bit CBC
VPN connection authentication	PKI, 3072 bit RSA	PKI, 3072 bit RSA	PKI, 3072 bit RSA
Concurrent VPN connections	Max 10	Max 50	Max 50
Supported platforms	N/A	N/A	N/A
TosiOnline™ - automatic connection recovery functionality	Yes	Yes	Yes
PoE functionality	No	PoE in and PoE out: 27 V / 580 mA max	No
Approvals	CE, FCC	CE, FCC, UL	CE, FCC, UL (all pending)
WLAN	802.11b/g/n	No	802.11b/g/n
Measurements (LxWxH)	132 mm x 99 mm x 35.5 mm / 5.2" x 3.9" x 1.39"	140 mm x 36 mm x 125 mm / 5.51" x 1.41" x 4.92"	110 mm x 58 mm x 127 mm / 4.33" x 2.28" x 5.0"
Power consumption	Max 7.2 W	Max 7 W	Max 10 W
Product code	TBL1	TBL2	TBL5, TBL5PS, TBL5iA, TBL5iAPS, TBL5iB, TBL5iBPS

Functions	TOSIBOX® Key	TOSIBOX® SoftKey	TOSIBOX® Mobile Client
TOSIBOX® Plug & Go™ Technology	Yes	Yes	Yes
Key role	Master Key, Backup Key, Sub Key	Sub Key	Sub Key
Cryptographic key size and type	2048 bit RSA, hardware-based	4096 bit RSA	2048 bit RSA
Data encryption	TLS, Blowfish-128-CBC, AES-128-CBC, AES-256-CBC	TLS, Blowfish-128-CBC, AES-128-CBC, AES-256-CBC	TLS, Blowfish-128-CBC, AES-128-CBC, AES-256-CBC
VPN connection type	Layer 2 / Layer 3 (OpenVPN)	Layer 2 / Layer 3 (OpenVPN)	Layer 3 (OpenVPN on Android, IPsec/IKEv2 on iOS)
Mobile Client for Android and iOS	Yes (1 license incl.)	No	N/A
Two-factor authentication	Yes	Yes	Yes
Product code	TBK2	TBSKL1, TBSKL5, TBSKL10	TBMC1, TBMC5, TBMC10



Functions	TOSIBOX® Central Lock	TOSIBOX® Virtual Central Lock*
Yes	Yes	Yes
19" rack mounting, rails included	N/A	N/A
90 - 264 V AC	N/A	N/A
No	N/A	N/A
1 Gbit/s	One required, dependent on virtual platform	One or more, dependent on virtual platform
4 x 1 Gbit/s, independent	One or more, dependent on virtual platform	One or more, dependent on virtual platform
Up to 700 Mbit/s	Dependent on virtual platform	Dependent on virtual platform
Blowfish 128 bit CBC, AES 128/192/256 bit CBC	Blowfish 128 bit CBC, AES 128/192/256 bit CBC	Blowfish 128 bit CBC, AES 128/192/256 bit CBC
PKI, 3072 bit RSA	PKI, 3072 bit RSA	PKI, 3072 bit RSA
Max 4000	Dependent on virtual platform and license	Dependent on virtual platform and license
N/A	VMWare ESXi, Microsoft Hyper-V, Linux KVM	N/A
N/A	N/A	N/A
No	No	No
CE, FCC, UL	N/A	N/A
No	No	N/A
570 mm x 430 mm x 43 mm / 22.44" x 16.93" x 1.69"	N/A	N/A
Max 250W	N/A	N/A
TBCL1	TBVCL1	TBVCL1LP100 Licence Package required

* Please see all requirements on Virtual Central Lock datasheet

Patented security

TOSIBOX® is globally audited, patented and performs at the highest security levels in the industry. It's not a cloud service, but a direct VPN tunnel between the physical devices. Only trusted devices can access the network.

All of the users and keys are managed from a single console. So you can be sure that your network and data will remain encrypted and secure.



Accessories

TOSIBOX® 4G Modem	TB4GM2
Antenna for 2G/3G/4G modem	TBANT1
3G/4G antenna with magnet stand	TBANT2
DIN rail mounting bracket	TBMBD1