TELTONIKA | Networks

JANUARY, 2022

PRODUCT CATALOG

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WHO WE ARE?

23 YEARS OF IoT BUSINESS

We are a rapidly growing technology company, manufacturing professional network connectivity equipment for international markets. Through long-term experience and research and development of industrial network devices for IoT and M2M communication, we have developed a wide portfolio of products for the most complex areas, such as Industry 4.0, Smart City, and Green Energy.

OUR MISSION IS

to be a fast and flexible partner and be closer to our clients in every world region. Longstanding experience, reliable supply chain, and highest technology process models enable us to produce millions of IoT devices to our clients.

OUR VISION IS

to become one of the global leaders providing unique IoT solutions that contribute to making people's lives easier. We are open-minded to establish the environment for the creative and ambitious work professionals in Lithuania and the rest of the world to grow and contribute towards our Mission.

OUR VALUES ARE

not only working but also living to help and sharing kindness to people, especially those who need our help the most. We are keeping our values by continuously and courageously creating synergy between Teltonika IoT Group and business partners as well as clients.

30 OFFICES IN 21 COUNTRIES

OUR TEAM

BIGGEST STRENGTH!

Teltonika Networks has a proven track record of rapid growth within professional and industrial cellular connectivity market segments. It would not be possible without a strong, ambitious, and continuously growing team.

500+ employees world wide

58% overall team growth in 2021

67% RND team growth in 2021

20+ nationalities

B2B TELTONIKA ACADEMY

IoT TELTONIKA ACADEMY

MORE THAN 300 COMPLETED INTERNSHIPS

GROWING TALENT

We have established IoT and B2B academies that closely collaborate with local universities by hosting guest lectures and supporting them with custom scholarships. However, the biggest gain of these academies is the student internships. During them, we share all of our know-how and experience. This practice is also beneficial to us as it helps to attract the best talent to join our young but already experienced team.

HOLISTIC APPROACH

MADE IN EUROPE

From concept to the finished product – we develop everything in-house to ensure maximum quality and efficiency. It enables us to move much faster because we do not rely on any externalities.

Over the years, we have implemented hundreds of customized projects, from the smallest firmware changes to full-scale hardware alterations. This experience helped our partners capture more opportunities in the fast-paced technology environment - together.

We make all of our products in the state-of-the-art Teltonika IoT Group manufacturing facility in Vilnius, Lithuania. Full control over our production allows us to ensure that we deliver only the best and most reliable devices.

5 MODERN SMT LINES

100+ ROBOTS FOR AUTOMATION

ECOFRIENDLY PACKAGING AND LASER ENGRAVING

FROM CONCEPT TO THE FINISHED PRODUCT

EXPERIENCE

For more than 23 years we have been providing reliable Industrial IoT & M2M connectivity solutions that are secure and easy to use.

FLEXIBILITY

We have implemented hundreds of customized projects from the smallest firmware changes to full-scale hardware alterations.

ALL IN ONE

From concept to the finished product – we develop everything in-house to ensure maximum quality and efficiency.

PORTFOLIO

WE HELP YOU CONNECT

We designed our product portfolio to help our partners access opportunities within the rapidly growing IoT and Industrial IoT space. It consists of modems, gateways, routers, switches, and IoT platforms. We have grown to be one of the leaders of cellular IoT devices for industrial and professional applications. From automation, smart grid, to public transport connectivity – hundreds of thousands of our networking products are currently at the heart of our partners' solutions.

GROWING PORTFOLIO

+2	+3	+5	+5	+5
2017	2018	2019	2020	2021

27 DEVICES - UNLIMITED USE CASES

INDUSTRIAL & AUTOMATION

Global adoption of automation demands the ability to monitor and manage equipment remotely to increase productivity.

ENERGY & UTILITIES

Reducing power consumption and maintenance costs by building wired and wireless IoT connectivity solutions.

SMART CITY

Connected sensors, infrastructure, vehicles, and devices require secure and reliable IoT connectivity products.

TRANSPORTATION

Networking devices transport operators to optimize their businesses and create new revenue streams.

ENTERPRISE

Enterprise applications require primary and backup connectivity solutions that are secure, reliable, and easy to use.

RETAIL

IoT connectivity solutions offer new ways to interact with clients and collect valuable data to make strategic decisions.

OUR FOCUS

INSPIRE

At Teltonika Networks, we have a clearly defined product development philosophy which we use at every stage of product development decision-making. We know that security and reliability are the two core factors in industrial networking device selection. However, we thrive on offering complex and capable devices without sacrificing ease of use. We wish to make IoT accessible to every enthusiast and inspire creativity in solving real-life problems with technology.

RELIABLE

We have long-standing experience manufacturing industrial devices that can withstand the most rigorous environments and offer connection continuity with multiple backup scenarios.

SECURE

We assure the highest level of security for all Teltonika Networks products by performing regular safety tests and releasing periodical firmware updates to eliminate any risks of breaches.

EASY TO USE

Industrial Teltonika Networks devices are designed mainly for professional applications, yet they are still easy to use. Offering products that do not require any special training is one of our strengths.

RUTOS

OPERATING SYSTEM FOR NETWORKING PRODUCTS

RutOS is our unified router operating system and the core component of all Teltonika Networks products. 10+ years of development made RutOS grow to the highest industry standards. Security, stability, and user experience are the key values that our platform is built around. Intuitive Web interface and constantly growing Wiki/Crowd-Support platforms help our partners cut costs on engineer training while implementing new devices or migrating from other systems.

Teltonika Networks products stand out as easily manageable devices on the market. Multiple remote monitoring and control functions are an inseparable part of RutOS. This Open-source OpenWrt-based operating system and complete software documentation enable easy development of custom software solutions or new functionality and fast integration with third-party platforms.

COMPLETE SOLUTION

RMS

REMOTE MANAGEMENT SYSTEM

RMS is a cloud-based IoT platform designed for intuitive and convenient remote monitoring, configuration, and control of compatible Teltonika Networks products and third-party devices. We offer four different services that allow for extensive management and advanced analytics. Choose a service that meets the needs of your current solution infrastructure and incorporate it into a familiar system environment using RMS API.

RMS

REMOTE MANAGEMENT SYSTEM

The Remote Management System (RMS) by Teltonika Networks allows you to control your whole connected IoT solution from anywhere in the world. RMS offers remote access to all devices from a single user-friendly platform. We tailored RMS to meet the requirements of various clients with four available RMS services.

NO PUBLIC IP

Access your devices anywhere, without public IP

SECURE

Protect your data with encrypted communication

CUSTOMIZABLE

Adapt the interface and functionality to your needs

EFFICIENT

Optimize time and resources with remote access

TRY RMS FOR FREE

Explore the potential of any available RMS service with a 30-day trial!

MANAGEMENT

RMS MANAGEMENT enables complete control over your fleet of Teltonika Networks routers and gateways, assuring their security and availability. Enjoy the flexibility of remote configurations, monitoring, and updates of your connectivity device ecosystem even without a public IP!

// MULTI-CONFIGURATION & FOTA
// HISTORICAL DATA AND REPORTS
// USER FRIENDLY INTERFACE
// TASK MANAGER FOR CUSTOM FUNCTIONS
// 24/7 MONITORING AND ALARMS
// LIMITED TIME THIRD PARTY ACCESS

CONNECT

RMS CONNECT is a unified access system that allows remotely reaching and controlling smart devices. If your PLC, Industrial PC, CCTV camera, POS system, or other intelligent device is reachable by one of the RMS-compatible routers or gateways, you can access it with RMS CONNECT.

Reach any device's WEB interface using HTTP(S)

No GUI, no problem! Access any device terminal via SSH or Telnet

Access remote PC, HMI, or any desktop with RDP and VNC protocols

API

What could be more efficient than having a single software system for your whole connected solution infrastructure? RMS API allows your IoT Platform to directly interact with RMS and get all the needed functionality and data.

FAMILIAR INTERFACE

TESTING SANDBOX

OPENAPI STANDARD

DEVELOPER PORTAL

VPN

Managing large-scale networks containing various devices can be tricky! RMS VPN offers the easiest way of setting up VPN connections to your whole infrastructure. Now you may remotely, simply, and securely reach multiple endpoints without configuring different protocols or setting up servers. We will take care of all this for you in the background!

// We use a top-trusted world-renowned OpenVPN protocol to establish secure connections with your devices.

// Use our on-demand service for an unlimited number of VPN clients. Pay only for the amount of data you use!

CENTRALIZED REMOTE VENDING MACHINE POS SYSTEM MANAGEMENT

RETAIL

Vending machines have been around for centuries. Their popularity is still on the rise for several reasons. First, they do not require any human presence and save time in fast-paced environments. Also, they offer 24/7 availability and do not need much space, hence lower upkeep costs.

SOLUTION

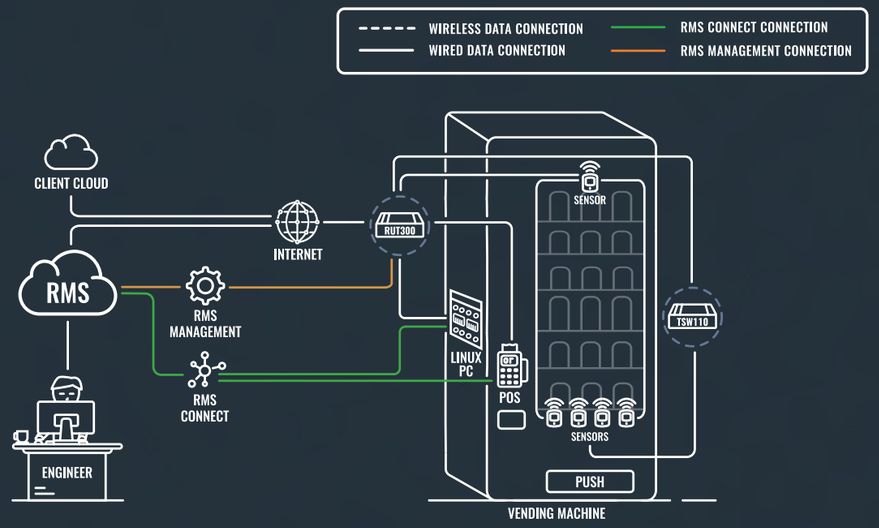
Usually, vending machines use third-party cashless payment terminals. An essential element for these systems is having uninterrupted, secure internet connectivity. In this case, the RUT300 Ethernet router connects the POS, Linux PC, and various sensors to the network using five Gigabit Ethernet ports. TSW110 gateway enables connecting more sensors for a plug-n-play ecosystem expansion.

Another vital element in such solutions is remote management capability. Vending machine operators look after hundreds of machines in varied distanced locations. Due to stringent security policies, they require frequent firmware updates. Here RMS comes in to save the day of engineers and support specialists. Not only may they connect to Teltonika Networks routers for diagnostics, updates, and troubleshooting via RMS Management, but they can also reach third-party devices, including the POS terminal, via RMS Connect to carry out whatever tasks they require.

To better illustrate the gain of RMS, let's multiply the number of vending machines by the hourly rate of an engineer and the fuel consumption needed to visit multiple remote locations. With RMS Connect, users can update thousands of POS terminals simultaneously from anywhere they are.

BENEFITS

/Remote management of Teltonika Networks devices via RMS Management for diagnostics, maintenance, and troubleshooting.
/Remote accessibility of third-party devices via RMS Connect.
/Real-time alerts to stay on top of your solution and prevent costly downtime.
/Periodical or on-demand activity reports for optimization.
/Compatible with various OS, including Linux, Windows, and Mac.
/Hosted on AWS, RMS complies with rigorous security requirements and aligns with the latest cyber threat data.
/Friendly payment plans: pay only for the services you need and the amount of data you use.



REMOTE CALIBRATION AND CONTROL OF SMART TRAFFIC LIGHTS

SMART CITY

One of the essential elements to combat heavy traffic is city planning. Our client received a project to install the first Microprocessor Optimized Vehicle Actuation and place it in one of the busiest roundabouts. Yet, the system had to be calibrated by a manufacturer expert. Thus, due to Covid-19 travel restrictions, meeting project delivery dates was a massive challenge.

SOLUTION

Our client decided to redesign their solution by adding Teltonika Networks connectivity products to meet the deadlines. They chose to establish remote communication by using the RUT240 industrial cellular router so that the engineer could calibrate the system while staying abroad.

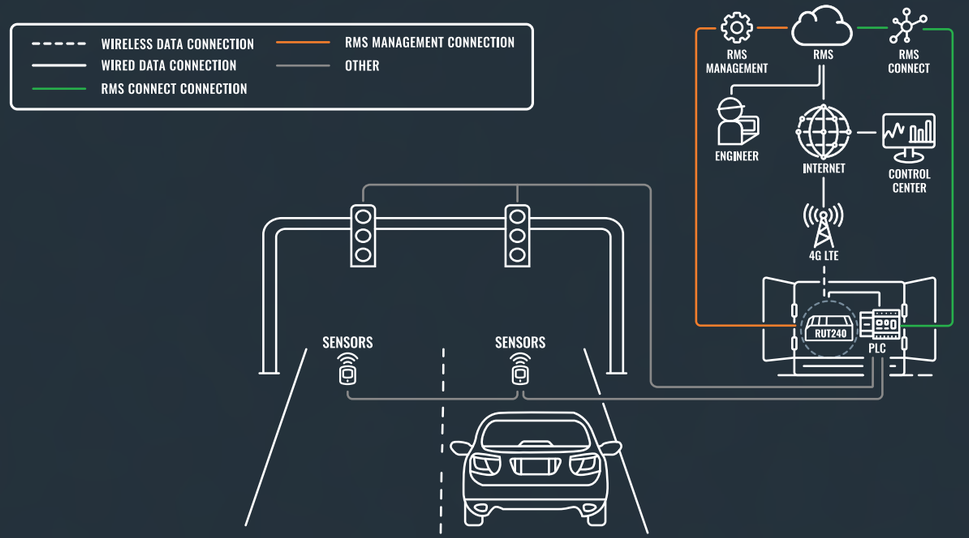
First, the RUT240 router provides an internet connection to this IoT solution. A traffic signal controller connects with the router via an Ethernet cable. Then the PLC can accommodate all of the traffic signals and sensor connections. The PLC can regulate traffic green light time with the data from induction loops installed on the tarmac.

Another part of this solution is the Teltonika Networks RMS. Teltonika RMS Management allows the RUT240 to monitor its temperature, install firmware updates, or set up alerts. RMS Management can accommodate more compatible Teltonika Networks devices in the future without the need for public IPs.

On the other hand, the RMS Connect can access any other third-party equipment. With its help, you can then remotely manage any settings of the connected devices as if you were there physically. That is also how the engineer was able to calibrate the PLC remotely.

BENEFITS

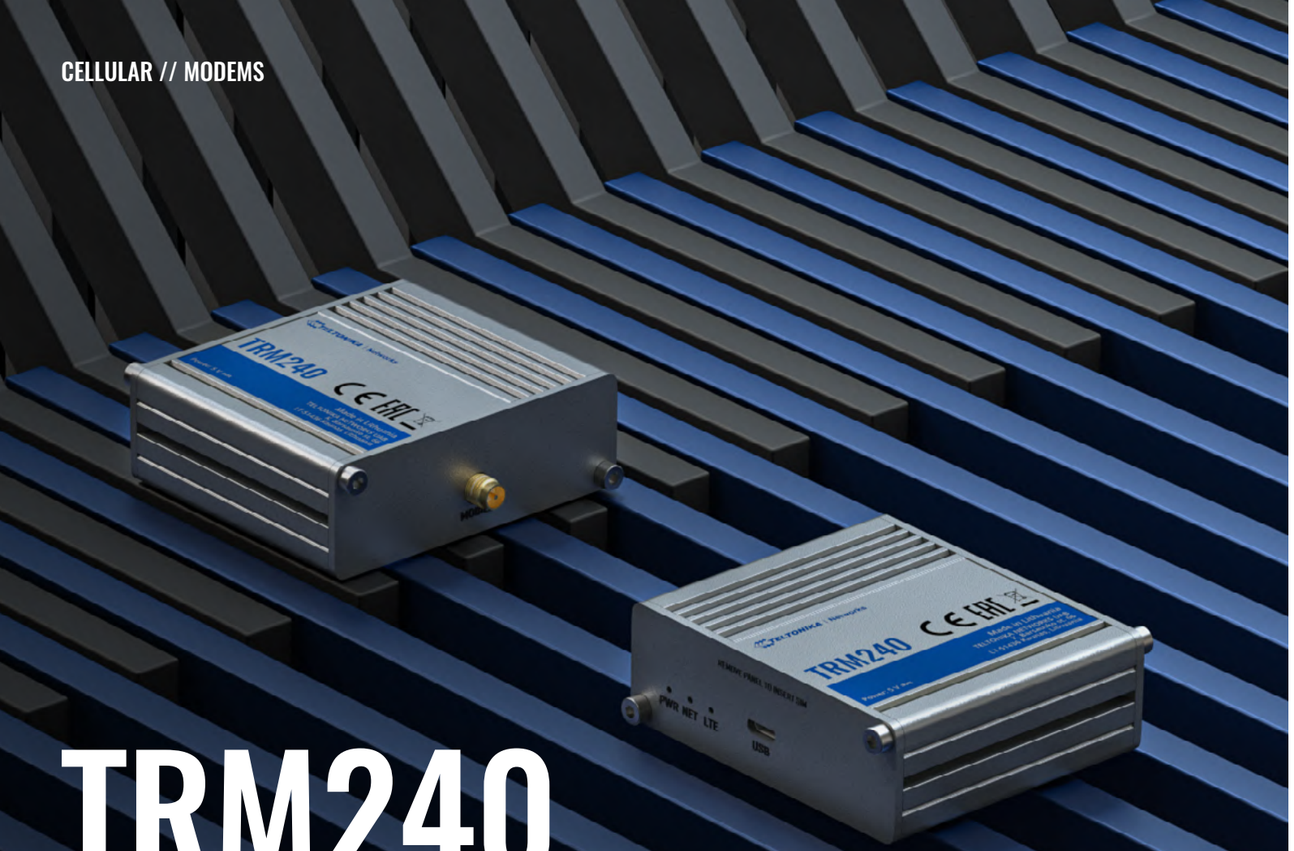
/The RUT240 offers easy integration due to its 4G connectivity and small size.
/RUT240 delivers high performance in rigorous environments, a perfect choice for solutions in extreme conditions, for example, near high traffic where you need resistance to vibrations. During the summer, the router's temperature had reached 78°C, and it still worked fine.
/Teltonika RMS Connect allows access to any connected smart devices to configure them and extract data.
/RMS Management allows access and control for all compatible Teltonika Networks devices without the need for a public IP.



CELLULAR

MODEMS // GATEWAYS // ROUTERS

Teltonika Networks offers a wide array of cellular networking products to make your connectivity reliable, secure, and quickly deployable even in challenging scenarios. Our routers, modems, and gateways will help you build a solid IoT, M2M, or enterprise networking infrastructure, while advanced remote management capabilities will enable you to manage it with ease.



TRM240

INDUSTRIAL CELLULAR MODEM

TRM240 is an industrial-grade USB LTE Cat 1 modem with a rugged housing and an external antenna for better signal coverage. This product is perfect for upgrading existing industrial equipment with cost-efficient LTE connectivity.

CONNECTIVITY
4G LTE (Cat 1), 3G, 2G

COMPACT & DURABLE
Small size, easy installation

USB
Interface for Internet access

EXTERNAL ANTENNA
For deployment flexibility

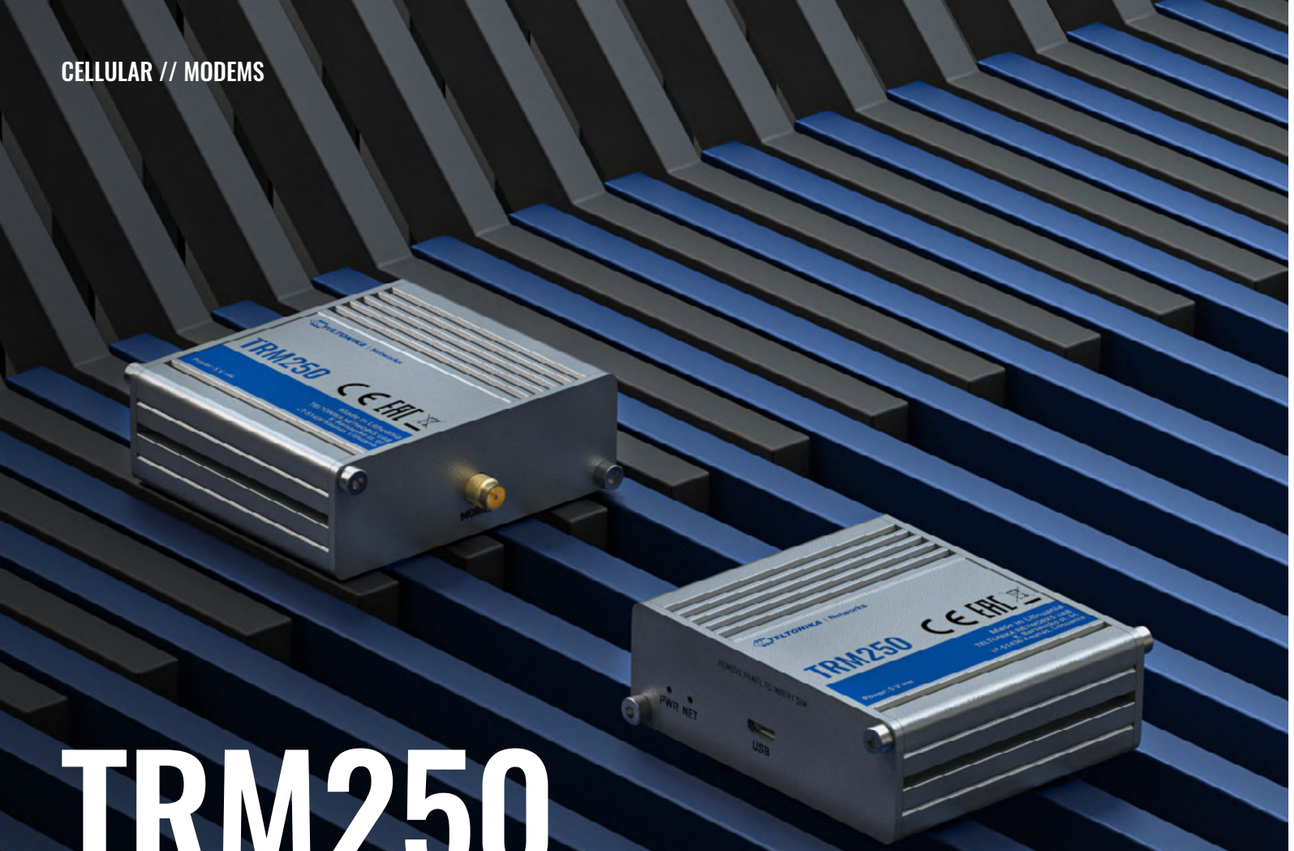
STANDARD PACKAGE CONTAINS:
TRM240 // 1 x LTE antenna (swivel, SMA male) // Micro-USB cable (0.8 m) // 1 x hex key // QSG (Quick Start Guide) // Packaging box

HARDWARE

Mobile	4G/LTE (Cat 1), 3G, 2G
Powering option	microUSB, 5 VDC
SIM	1 x Internal SIM holder (2FF)
Antenna connectors	1 x SMA for mobile
USB	1 x Micro USB slave
Status LEDs	1 x LTE, 1 x Network, 1 x Power
Ingress protection rating	IP30
Operating humidity	10 % to 90 % non-condensing
Operating temperature	-40 °C to 75 °C
Housing	Aluminium housing with DIN rail mounting option
Dimensions (W x H x D)	74.5 x 25 x 64.5 mm
Weight	131 g

SOFTWARE

Network manager	Windows 7/8/8.1/10 Linux distributions
USB serial driver	Windows 7/8/8.1/10 Windows CE 5.0/6.0 Linux 2.6~5.4 Android 4.x/5.x/6.x/7.x/8.x/9.x
RIL driver	Android 4.x/5.x/6.x/7.x/8.x/9.x
NDIS driver	Windows 7/8/8.1/10
Gobinet driver	Linux 2.6~5.4
QMI_WWAN driver	Linux 3.4~5.4
Control via AT commands	3GPP TS27.007 and enhanced AT commands



TRM250

INDUSTRIAL CELLULAR MODEM

TRM250 is an industrial-grade USB LTE Cat-M1/NB-IoT/EGPRS modem with a rugged housing and an external antenna for better signal coverage. This product is perfect for providing cost-efficient internet connectivity in remote monitoring applications.

CONNECTIVITY
4G LTE (Cat M1), NB-IoT, 2G

COMPACT & DURABLE
Small size, easy installation

USB
Interface for Internet access

EXTERNAL ANTENNA
For deployment flexibility

STANDARD PACKAGE CONTAINS:

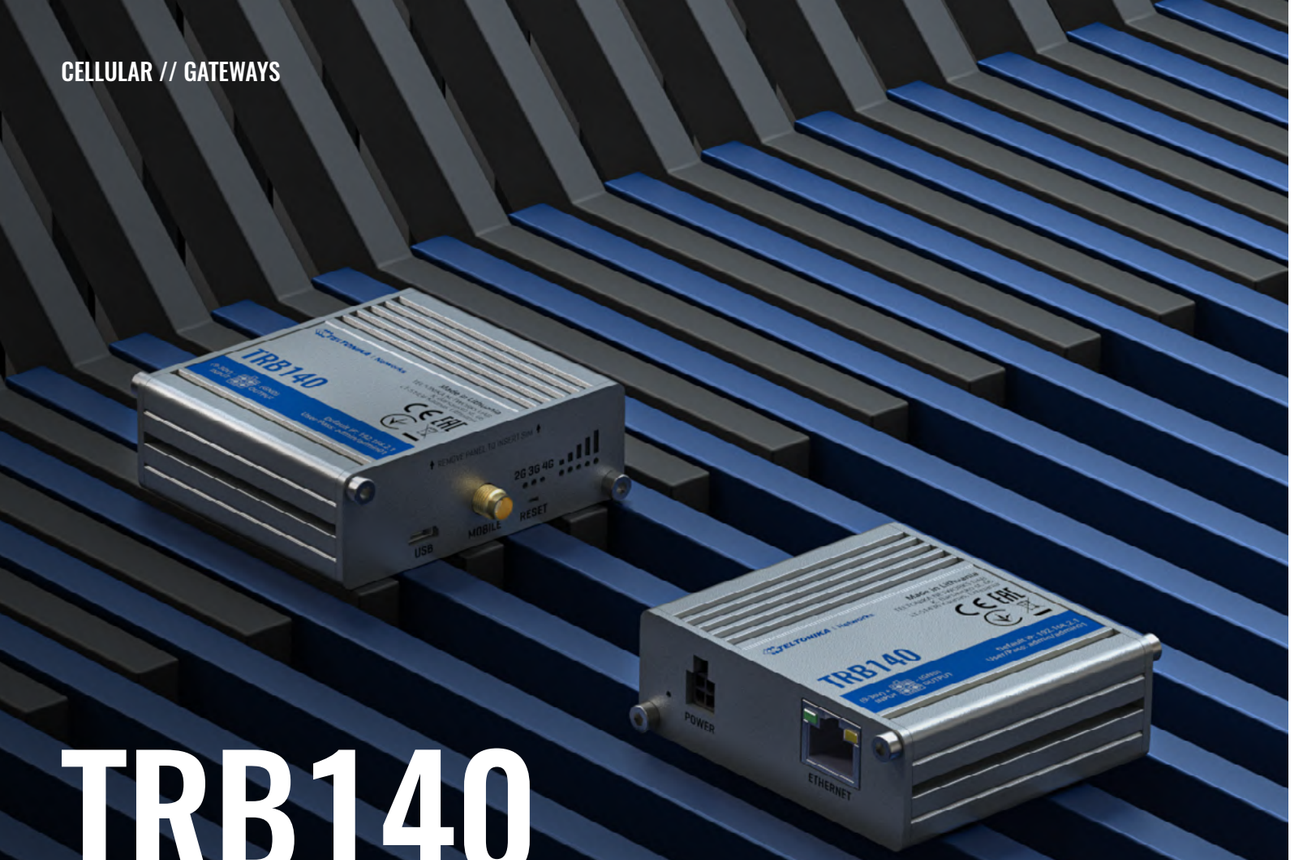
TRM250 // 1 x LTE antenna (swivel, SMA male) // Micro-USB cable (0.8 m) // 1 x hex key // QSG (Quick Start Guide) // Packaging box

HARDWARE

Mobile	4G/LTE (Cat M1), NB-IoT, 2G
Powering option	microUSB, 5 VDC
SIM	1 x Internal SIM holder (2FF)
Antenna connectors	1 x SMA for mobile
USB	1 x Micro USB slave
Status LEDs	1 x Network, 1 x Power
Ingress protection rating	IP30
Operating humidity	10 % to 90 % non-condensing
Operating temperature	-40 °C to 75 °C
Housing	Aluminium housing with DIN rail mounting option
Dimensions (W x H x D)	74.5 x 25 x 64.5 mm
Weight	130 g

SOFTWARE

Network manager	Windows 7/8/8.1/10 Linux distributions
USB serial driver	Windows 7/8/8.1/10 Windows CE 5.0/6.0 Linux 2.6~5.4 Android 4.x/5.x/6.x/7.x/8.x/9.x
RIL driver	Android 4.x/5.x/6.x/7.x/8.x/9.x
NDIS driver	Windows 7/8/8.1/10
Gobinet driver	Linux 2.6~5.4
QMI_WWAN driver	Linux 3.4~5.4
Control via AT commands	3GPP TS27.007 and enhanced AT commands



TRB140

INDUSTRIAL RUGGED LTE GATEWAY

TRB140 is an ultra-small, lightweight, and energy-efficient IoT device with mission-critical LTE Cat 4 and Gigabit Ethernet connectivity options. Linux environment offers a high degree of customization. This gateway is perfect for projects and applications where a single device must be upgraded with reliable and secure internet connectivity.

CONNECTIVITY
4G LTE (Cat 4), 3G, 2G

COMPACTNESS
Small and rugged aluminum housing for easy installation

PROTOCOLS
Compatible with industrial DNP3 & Modbus communication protocols

RMS
For remote management, access & VPN services

STANDARD PACKAGE CONTAINS:

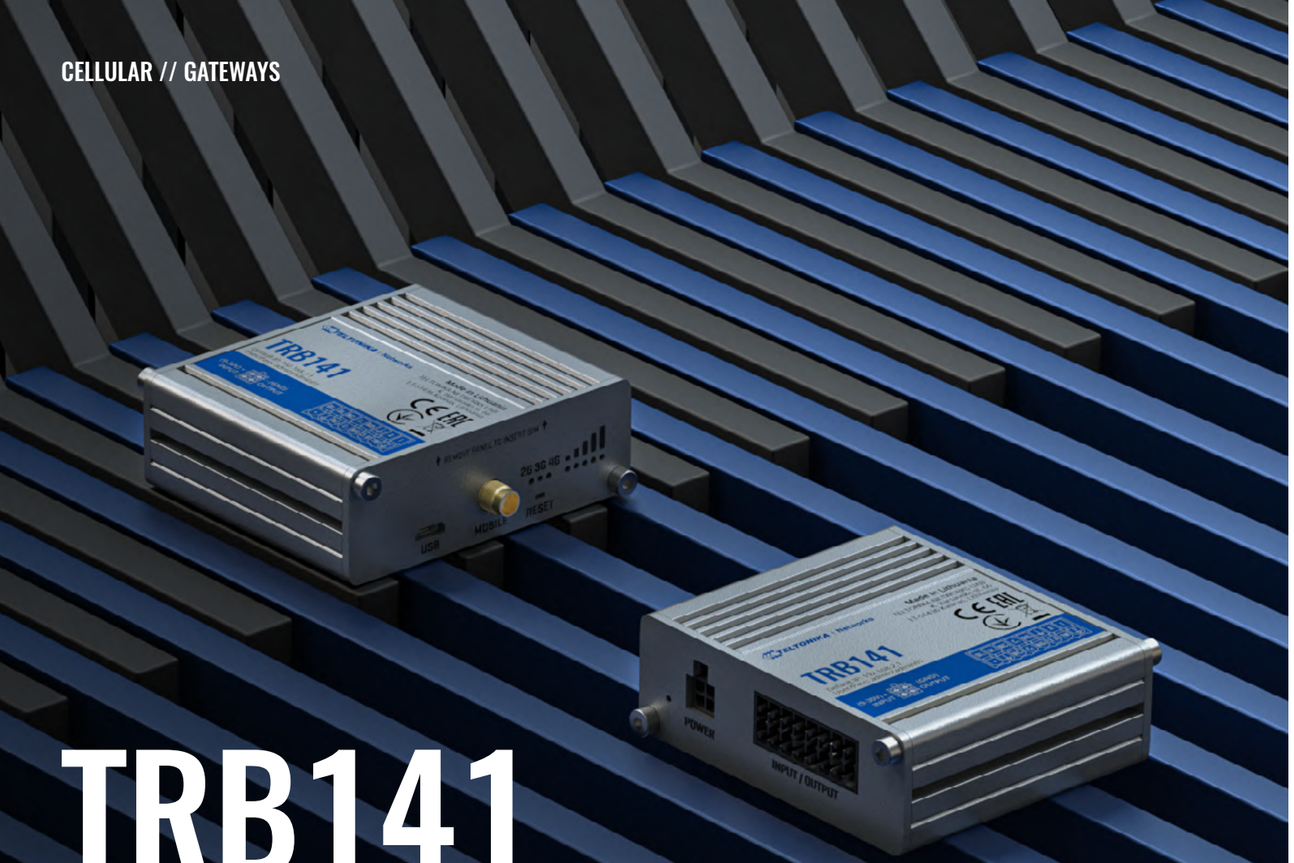
TRB140 // 9 W PSU // 1 x LTE antenna (magnetic mount, SMA male, 3 m cable) // Micro-USB cable (0.8 m) // 1 x hex key // LAN cable // RMS Flyer // QSG (Quick Start Guide) // Packaging box

HARDWARE

Mobile	4G/LTE (Cat 4), 3G, 2G
CPU	Qualcomm, ARM Cortex A7, 1.2 GHz
Storage	512 MBytes Flash (200 MBytes for userspace)
Memory	128 MBytes RAM (50 MBytes for userspace)
Powering option	4pin power socket, 9-30 VDC
SIM	1 x Internal SIM holder (2FF)
Antenna connectors	1 x SMA for mobile
Ethernet	1 x 10/100/1000 Ethernet port
Inputs/Outputs	On 4pin socket: 2 x Digital input/Digital open collector output (configurable)
Other	1 x Micro USB slave
Status LEDs	3 x Connection type, 5 x Signal strength, 2 x Ethernet, 1 x Power
Operating temperature	-40 °C to 75 °C
Housing	Aluminium housing with DIN rail mounting option
Dimensions (W x H x D)	74.5 x 25 x 64.4 mm
Weight	134 g

SOFTWARE

Operating system	RutOS
Mobile features	Auto APN, Band lock, Operator black/white list, Data/SMS limits
Network protocols	TCP, UDP, IPv4, IPv6, ICMP, NTP, DNS, HTTP, HTTPS, FTP, SMTP, SSLv3, TLS 1.3, ARP, PPP, PPPoE, DHCP, Telnet
Firewall	Port forward, Traffic rules, Custom rules, Pre-configured firewall rules, NAT, NAT-T, NAT helpers, Unlimited firewall configuration via CLI
Security	DDOS prevention (SYN flood protection, SSH attack prevention, HTTP/HTTPS attack prevention), Port scan prevention (SYN-FIN, SYN-RST, X-mas, NULL flags, FIN scan attacks)
VPN and tunneling	OpenVPN, IPsec, GRE, PPTP, SSTP, Stunnel, DMVPN L2TP, ZeroTier, WireGuard
Monitoring and Management	WEB UI, CLI, SSH, CALL, SMS, TR-069, SNMP, JSON-RPC, MQTT, MODBUS, RMS
Connection monitoring	Ping Reboot, Wget reboot, Periodic Reboot, LCP and ICMP for link inspection
Cloud solutions	RMS, FOTA, Azure IoT Hub, Cloud of Things, Cumulocity, ThingWorx
SMS features	SMS status, SMS configuration, Send/Read SMS via HTTP POST/GET, EMAIL to SMS, SMS to Email, SMS to HTTP, SMS to SMS, scheduled SMS, SMS autoreply, SMPP
Services	WEB UI, CLI, SSH, SMS, TR-069, SNMP, JSON-RPC, MQTT, RMS



TRB141

INDUSTRIAL RUGGED GPIO LTE GATEWAY

TRB141 is a small industrial LTE Cat 1 gateway equipped with diverse inputs/outputs and a Micro USB port. This gateway comes with secure, highly customizable RutOS and works perfectly for remote management of devices and applications using I/O.

CONNECTIVITY
4G LTE (Cat 1), 3G, 2G

COMPACTNESS
Small and rugged aluminum housing for easy installation

I/O
Wide range of Inputs/Outputs for remote monitoring and control

PROTOCOLS
Compatible with industrial DNP3 & Modbus communication protocols

STANDARD PACKAGE CONTAINS:

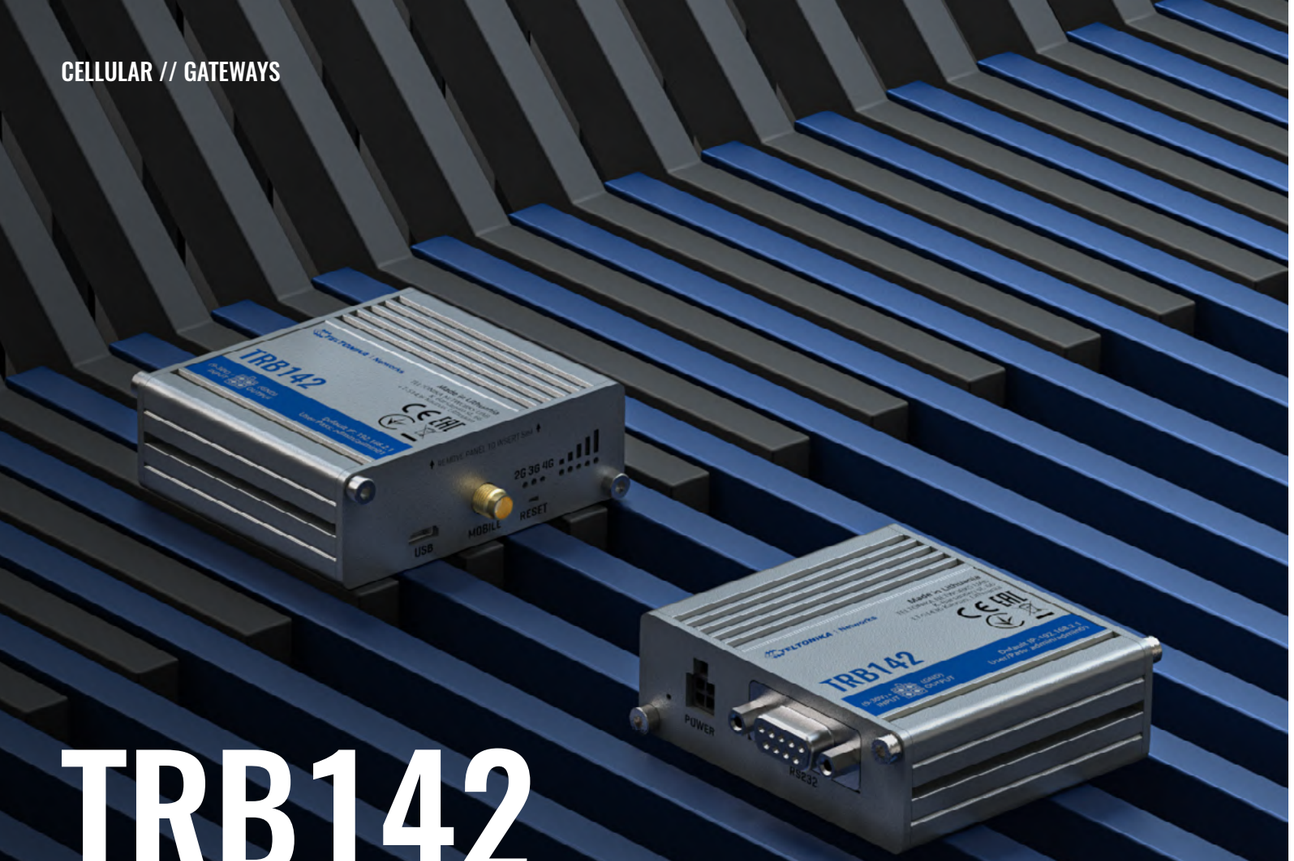
TRB141 // 9 W PSU // 1 x LTE antenna (magnetic mount, SMA male, 3 m cable) // Micro-USB cable (0.8 m) // 1 x hex key // I/O connector // RMS Flyer // QSG (Quick Start Guide) // Packaging box

HARDWARE

Mobile	4G/LTE (Cat 1), 3G, 2G
CPU	Qualcomm, ARM Cortex A7, 1.2 GHz
Storage	512 MBytes Flash (200 MBytes for userspace)
Memory	128 MBytes RAM (50 MBytes for userspace)
Powering option	4pin power socket, 9-30 VDC
SIM	1 x Internal SIM holder (2FF)
Antenna connectors	1 x SMA for mobile
Inputs/Outputs	On 4pin socket: 2 x Digital input/Digital open collector output (configurable) On 16pin socket: 1 x Isolated input, 1 x Single wire input, 1 x Analog input (with 4-20mA capability), 1 x Latching relay output, 1 x Non-latching relay output, 2 x Dry/Wet input (configurable)
Other	1 x Micro USB slave
Status LEDs	3 x Connection type, 5 x Signal strength, 1 x Power
Operating temperature	-40 °C to 75 °C
Housing	Aluminium housing with DIN rail mounting option
Dimensions (W x H x D)	74.5 x 25 x 64.4 mm
Weight	136 g

SOFTWARE

Operating system	RutOS
Network protocols	TCP, UDP, IPv4, IPv6, ICMP, NTP, DNS, HTTP, HTTPS, FTP, SMTP, SSLv3, TLS 1.3, ARP, PPP, PPPoE, DHCP, Telnet
VPN and tunneling	OpenVPN, IPsec, GRE, PPTP, SSTP, Stunnel, DMVPN L2TP, ZeroTier, WireGuard
Monitoring and Management	WEB UI, CLI, SSH, CALL, SMS, TR-069, SNMP, JSON-RPC, MQTT, MODBUS, RMS
Connection monitoring	Ping Reboot, Wget reboot, Periodic Reboot, LCP and ICMP for link inspection
Cloud solutions	RMS, FOTA, Azure IoT Hub, Cloud of Things, Cumulocity, ThingWorx
Services	DDNS, WEB filter, Traffic Logging



TRB142

INDUSTRIAL RUGGED LTE RS232 GATEWAY

TRB142 is an ultra-small, lightweight, and energy-efficient IoT gateway equipped with mission-critical LTE connectivity. TRB142 comes with a widely used RS232 interface for remote management of industrial devices.

CONNECTIVITY
4G LTE (Cat 1), 3G, 2G

COMPACTNESS
Small and rugged aluminum housing for easy installation

RS232
Equipped with RS232 for industrial serial communication

PROTOCOLS
Compatible with industrial DNP3 & Modbus communication protocols

STANDARD PACKAGE CONTAINS:

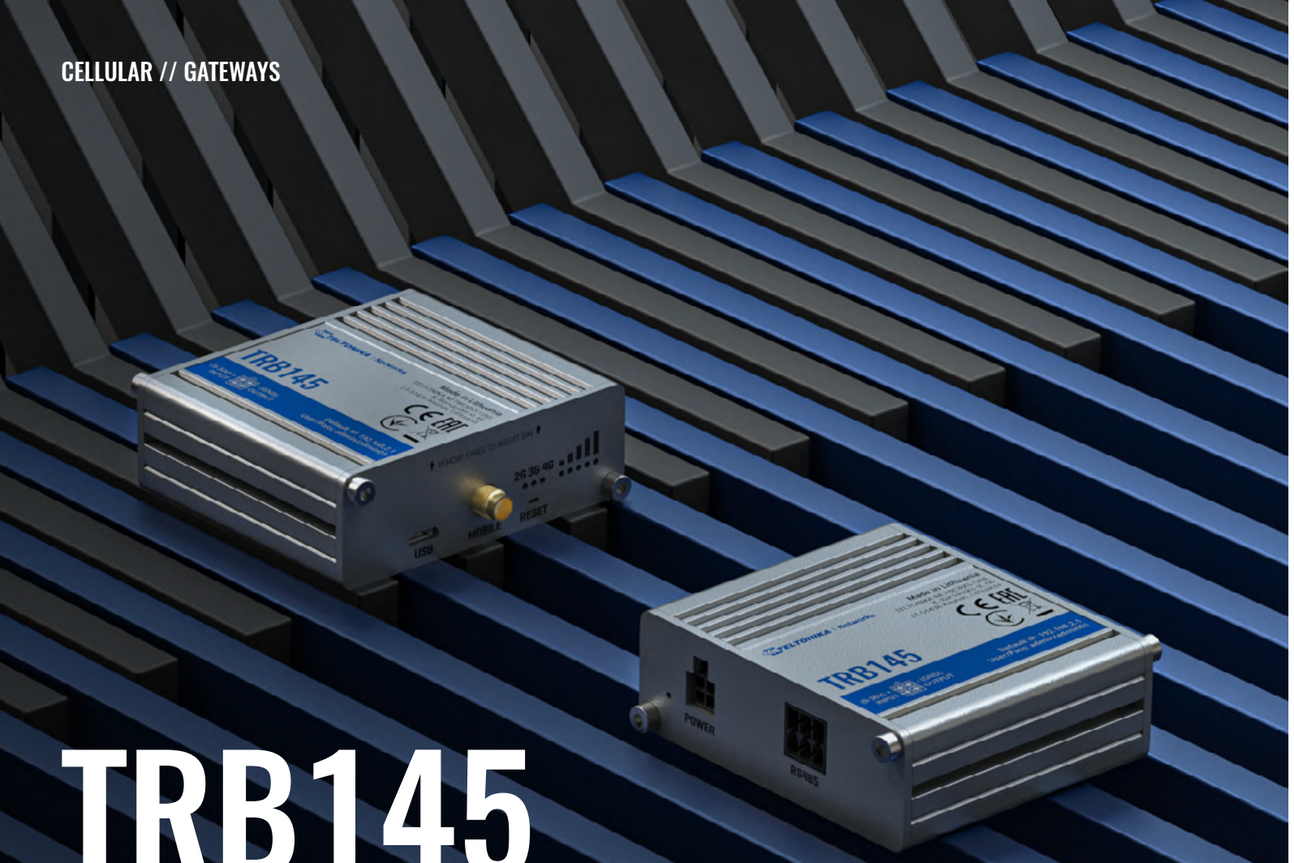
TRB142 // 9 W PSU // 1 x LTE antenna (magnetic mount, SMA male, 3 m cable) // Micro-USB cable (0.8 m) // 1 x hex key // RMS Flyer // QSG (Quick Start Guide) // Packaging box

HARDWARE

Mobile	4G/LTE (Cat 1), 3G, 2G
CPU	Qualcomm, ARM Cortex A7, 1.2 GHz
Storage	512 MBytes Flash (200 MBytes for userspace)
Memory	128 MBytes RAM (50 MBytes for userspace)
Powering option	4pin power socket, 9-30 VDC
SIM	1 x Internal SIM holder (2FF)
Antenna connectors	1 x SMA for mobile
Inputs/Outputs	On 4pin socket: 2 x Digital input/Digital open collector output (configurable)
Serial	1 x RS232
Other	1 x Micro USB slave
Status LEDs	3 x Connection type, 5 x Signal strength, 1 x Power
Operating temperature	-40° C to 75° C
Housing	Aluminium housing with DIN rail mounting option
Dimensions (W x H x D)	74.5 x 25 x 64.4 mm
Weight	135 g

SOFTWARE

Operating system	RutOS
Network protocols	TCP, UDP, IPv4, IPv6, ICMP, NTP, DNS, HTTP, HTTPS, FTP, SMTP, SSLv3, TLS 1.3, ARP, PPP, PPPoE, DHCP, Telnet
Monitoring and Management	WEB UI, CLI, SSH, CALL, SMS, TR-069, SNMP, JSON-RPC, MQTT, MODBUS, RMS
Connection monitoring	Ping Reboot, Wget reboot, Periodic Reboot, LCP and ICMP for link inspection
Cloud solutions	RMS, FOTA, Azure IoT Hub, Cloud of Things, Cumulocity, ThingWorx
Modbus	TCP slave, TCP master, RTU master, RTU gateway, Modbus over MQTT
Serial	Console, Over IP, Modem, NTRIP, Modbus



TRB145

INDUSTRIAL RUGGED LTE RS485 GATEWAY

TRB145 is an ultra-small, lightweight, and energy-efficient IoT gateway equipped with mission-critical LTE connectivity that comes with a widely used RS485 interface for remote management of industrial equipment.

CONNECTIVITY
4G LTE (Cat 1), 3G, 2G

COMPACTNESS
Small and rugged aluminum housing for easy installation

RS485
Equipped with RS485 for industrial serial communication

PROTOCOLS
Compatible with industrial DNP3 & Modbus communication protocols

STANDARD PACKAGE CONTAINS:

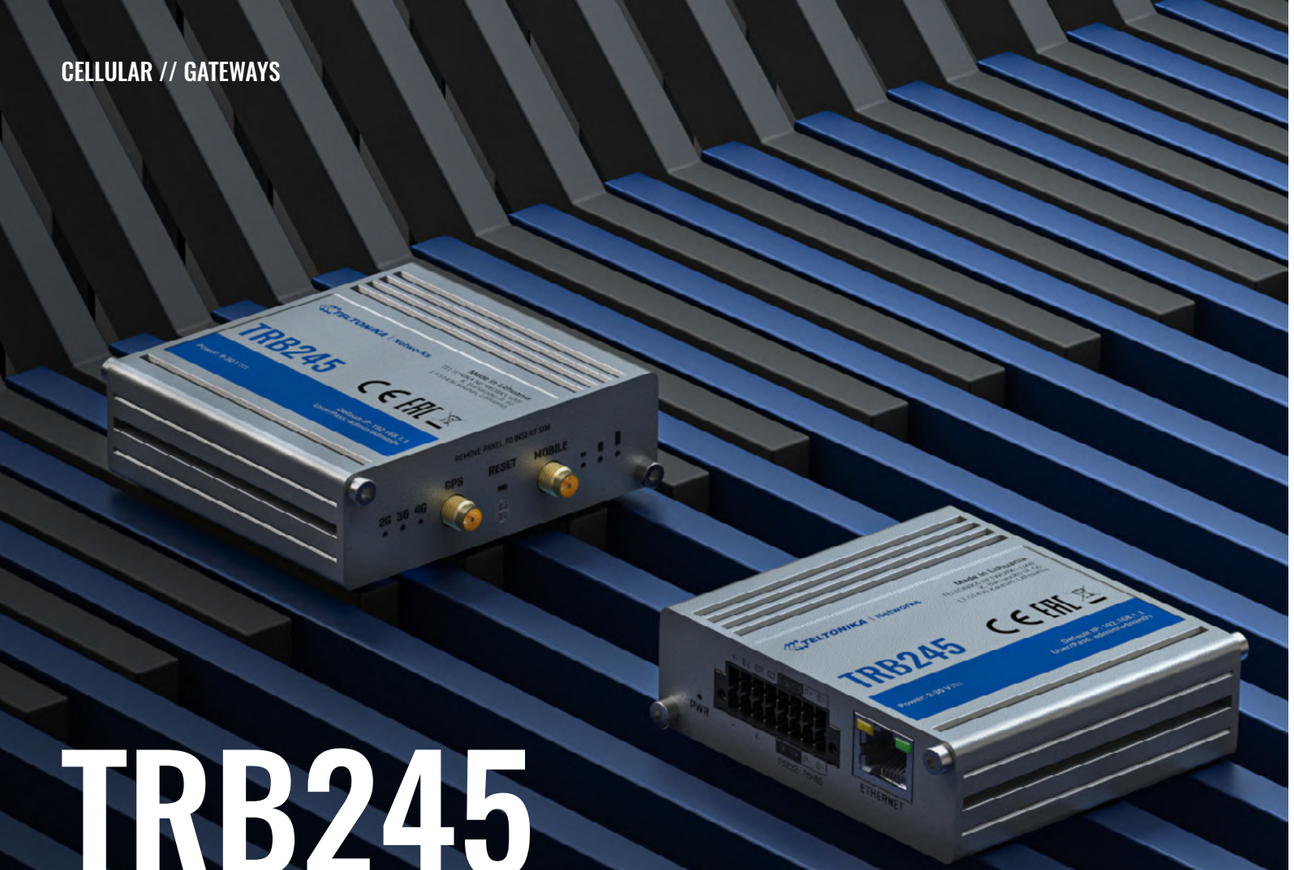
TRB145 // 9 W PSU // 1 x LTE antenna (magnetic mount, SMA male, 3 m cable) // Micro-USB cable (0.8 m) // 1 x hex key // RS485 connector // RMS Flyer // QSG (Quick Start Guide) // Packaging box

HARDWARE

Mobile	4G/LTE (Cat 1), 3G, 2G
CPU	Qualcomm, ARM Cortex A7, 1.2 GHz
Storage	512 MBytes Flash (200 MBytes for userspace)
Memory	128 MBytes RAM (50 MBytes for userspace)
Powering option	4pin power socket, 9-30 VDC
SIM	1 x Internal SIM holder (2FF)
Antenna connectors	1 x SMA for mobile
Inputs/Outputs	On 4pin socket: 2 x Digital input/Digital open collector output (configurable)
Serial	1 x RS485
Other	1 x Micro USB slave
Status LEDs	3 x Connection type, 5 x Signal strength, 1 x Power
Operating temperature	-40° C to 75° C
Housing	Aluminium housing with DIN rail mounting option
Dimensions (W x H x D)	74.5 x 25 x 64.4 mm
Weight	130 g

SOFTWARE

Operating system	RutOS
Network protocols	TCP, UDP, IPv4, IPv6, ICMP, NTP, DNS, HTTP, HTTPS, FTP, SMTP, SSLv3, TLS 1.3, ARP, PPP, PPPoE, DHCP, Telnet
Monitoring and Management	WEB UI, CLI, SSH, CALL, SMS, TR-069, SNMP, JSON-RPC, MQTT, MODBUS, RMS
Connection monitoring	Ping Reboot, Wget reboot, Periodic Reboot, LCP and ICMP for link inspection
Cloud solutions	RMS, FOTA, Azure IoT Hub, Cloud of Things, Cumulocity, ThingWorx
Modbus	TCP slave, TCP master, RTU master, RTU gateway, Modbus over MQTT
Serial	Console, Over IP, Modem, NTRIP, Modbus



TRB245

INDUSTRIAL M2M LTE GATEWAY

TRB245 is an industrial all-in-one M2M LTE Cat 4 gateway equipped with multiple inputs/outputs, RS232, RS485, and Ethernet interfaces, allowing for universal application in M2M solutions.

CONNECTIVITY
4G LTE (Cat 4), 3G, 2G

DUAL SIM
With auto failover, backup WAN and other switching scenarios

SERIAL PORTS
Equipped with RS232/RS485 serial communication interfaces

I/O
Multiple Inputs and Outputs for remote monitoring and control

STANDARD PACKAGE CONTAINS:

TRB245 // 9 W PSU // 1 x LTE antenna (swivel, SMA male) // 1 x GNSS antenna (adhesive, SMA male, 3 m cable) // 16 pin terminal block // 1 x hex key // RMS Flyer // QSG (Quick Start Guide) // Packaging box

HARDWARE

Mobile	4G/LTE (Cat 4), 3G, 2G
CPU	Qualcomm, MIPS 24Kc, 650 MHz
Storage	16 MB Flash
Memory	64 MB RAM
Powering option	16pin terminal, 9-30 VDC
SIM	2 x Internal SIM holders (2FF)
Antenna connectors	1 x SMA for mobile, 1 x SMA for GPS
Ethernet	1 x 10/100 Ethernet port
GNSS	GPS, GLONASS, BeiDou, Galileo, QZSS
Inputs/Outputs	On 16pin socket: 3 x Digital input/Digital open collector output (configurable), 1 x Analog input
Serial	1 x RS232, 1 x RS485
Status LEDs	3 x Connection type, 3 x Signal strength, 2 x Ethernet, 1 x Power
Operating temperature	-40 °C to 75 °C
Housing	Aluminium housing with DIN rail mounting option
Dimensions (W x H x D)	83 x 25 x 74.2 mm
Weight	165 g

SOFTWARE

Operating system	RutOS (OpenWrt based Linux OS)
Mobile features	Multiple PDN, Auto APN, Band lock, SIM switch, Operator black/white list, Data/SMS limits
Network protocols	TCP, UDP, IPv4, IPv6, ICMP, NTP, DNS, HTTP, HTTPS, FTP, SMTP, SSLv3, TLS 1.3, ARP, PPP, PPPoE, DHCP, Telnet
Monitoring and Management	WEB UI, CLI, SSH, CALL, SMS, TR-069, SNMP, JSON-RPC, MQTT, MODBUS, RMS
Connection monitoring	Ping Reboot, Wget reboot, Periodic Reboot, LCP and ICMP for link inspection
Cloud solutions	RMS, FOTA, Azure IoT Hub, Cloud of Things, Cumulocity, ThingWorx
NTP	NTP Server, NTP Client, Sync with: External NTP server, GNSS, Mobile operator
GNSS	NMEA forwarding, AVL, Geofencing
Modbus	TCP slave, TCP master, RTU master, RTU gateway, Modbus over MQTT
Serial	Console, Over IP, Modem, NTRIP, Modbus
Administration	Multi user, Configuration profiles, Diagnostics, logs, Configuration backup

TRB255

INDUSTRIAL M2M GATEWAY

Industrial all-in-one M2M LTE Cat-M1/NB-IoT/EGPRS gateway, equipped with multiple inputs/outputs, RS232, RS485, and Ethernet interfaces to be used universally in various M2M applications.

CONNECTIVITY
4G LTE (Cat M1), NB-IoT, 2G

DUAL SIM
With auto failover, backup WAN and other switching scenarios

SERIAL PORTS
Equipped with RS232/RS485 serial communication interfaces

I/O
Multiple Inputs and Outputs for remote monitoring and control

STANDARD PACKAGE CONTAINS:

TRB255 // 9 W PSU // 1 x LTE antenna (swivel, SMA male) // 1 x GNSS antenna (adhesive, SMA male, 3 m cable) // Ethernet cable (1.5 m) // 1 x hex key // RMS Flyer // QSG (Quick Start Guide) // Packaging box

HARDWARE

Mobile	4G/LTE (Cat M1), NB-IoT, 2G
CPU	Qualcomm, MIPS 24Kc, 650 MHz
Storage	16 MB Flash
Memory	64 MB RAM
Powering option	16pin terminal, 9-30 VDC
SIM	2 x Internal SIM holders (2FF)
Antenna connectors	1 x SMA for mobile, 1 x SMA for GPS
Ethernet	1 x 10/100 Ethernet port
GNSS	GPS, GLONASS, BeiDou, Galileo, QZSS
Inputs/Outputs	On 16pin socket: 3 x Digital input/Digital open collector output (configurable), 1 x Analog input
Serial	1 x RS232, 1 x RS485
Status LEDs	3 x Connection type, 3 x Signal strength, 2 x Ethernet, 1 x Power
Operating temperature	-40 °C to 75 °C
Housing	Aluminium housing with DIN rail mounting option
Dimensions (W x H x D)	83 x 25 x 74.2 mm
Weight	165 g

SOFTWARE

Operating system	RutOS (OpenWrt based Linux OS)
Mobile features	Multiple PDN, Auto APN, Band lock, SIM switch, Operator black/white list, Data/SMS limits
Network protocols	TCP, UDP, IPv4, IPv6, ICMP, NTP, DNS, HTTP, HTTPS, FTP, SMTP, SSLv3, TLS 1.3, ARP, PPP, PPPoE, DHCP, Telnet
Monitoring and Management	WEB UI, CLI, SSH, CALL, SMS, TR-069, SNMP, JSON-RPC, MQTT, MODBUS, RMS
Connection monitoring	Ping Reboot, Wget reboot, Periodic Reboot, LCP and ICMP for link inspection
Cloud solutions	RMS, FOTA, Azure IoT Hub, Cloud of Things, Cumulocity, ThingWorx
NTP	NTP Server, NTP Client, Sync with: External NTP server, GNSS, Mobile operator
GNSS	NMEA forwarding, AVL, Geofencing
Modbus	TCP slave, TCP master, RTU master, RTU gateway, Modbus over MQTT
Serial	Console, Over IP, Modem, NTRIP, Modbus
Administration	Multi user, Configuration profiles, Diagnostics, logs, Configuration backup

MANUFACTURING FACILITY REMOTE MANAGEMENT

// INDUSTRIAL & AUTOMATION

In 2020 there were more than 290 thousand manufacturing plants in the US alone. This number is bound to keep increasing as the world industry is ever-growing in size. Such industrial expansion can be hard to keep up with as hiring and training new personnel takes time. With the increase in the efficiency of their factories, companies resort to manufacturing and assembly line automation.

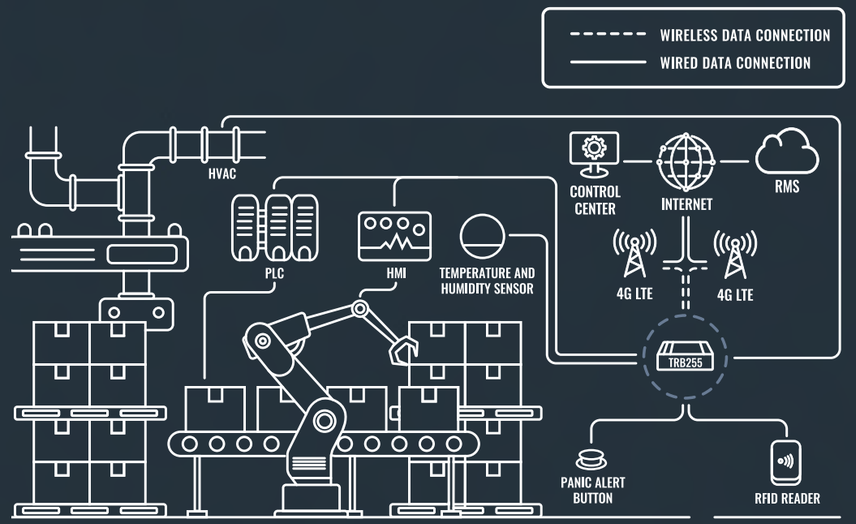
SOLUTION
Does the fact that one device from Teltonika Networks can connect a PLC, HMI, RFID, panic alert button and more intrigue you? That little device is the TRB255 industrial M2M gateway. First of all, this gateway can communicate with various devices responsible for working on the manufacturing line thanks to multiple interface ports.

For the primary connections — PLC can be connected via the RS232 serial communication interface, while HMI can take up the RS485. This setup takes care of the central production line machinery. The Ethernet connects the HVAC (Heating, Ventilation and Conditioning) system, which can be adjusted based on the temperature and humidity sensors' data, connecting to TRB255 through the analog input.

Teltonika industrial gateway can also accommodate all the other supporting systems thanks to its multiple differing connections. Such design can incorporate older components of the assembly line into one system. For example, a panic alert button can connect to one of the digital input/output ports, and another port can accommodate an RFID reader to ensure additional factory security.

While the TRB225 industrial gateway provides a way to incorporate all devices into one network, Teltonika Networks RMS (Remote Management System) lets you access all of it remotely. This setup enables you to reach our products and third-party equipment as if you were there physically and perform troubleshooting, update firmware, and change any settings.

BENEFITS
/Backward compatibility with the 2G network allows for installation in facilities using legacy equipment.
/The supported power supply voltages range from 9 to 30V, allowing easy integration with industrial components.
/Dual-SIM offers automatic failover in case the cellular network connection gets disrupted.
/TRB255 offers multiple interfaces, including RS232 and RS485, letting you connect old and new equipment in the same network.
/This router is compatible with the Teltonika RMS, which allows you to gather data and manage your Teltonika devices remotely.



WIRELESS PARKING AVAILABILITY DATA TRANSMISSION

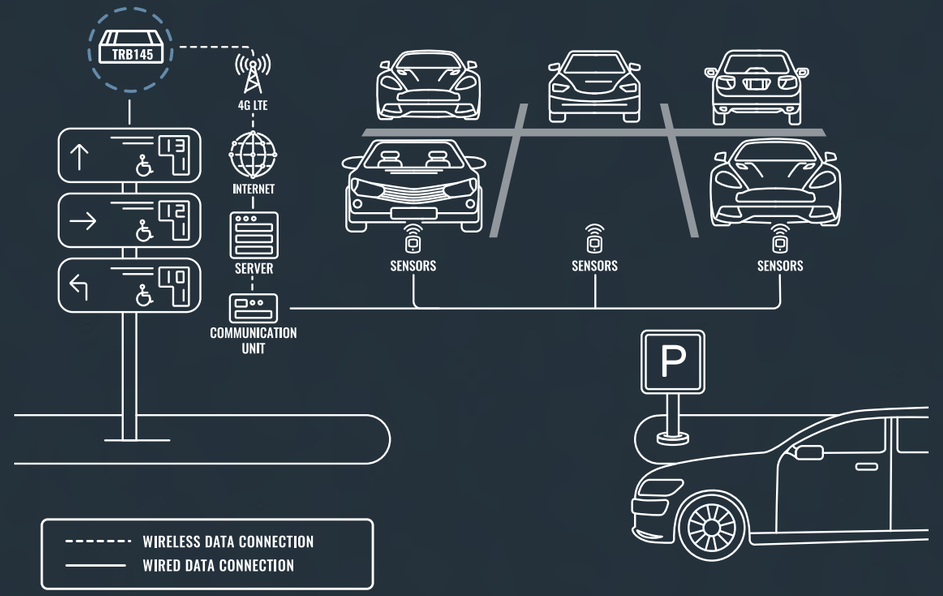
// SMART CITY

Due to the high volume of cars on the streets, up to 30% of traffic comprises daily commuters. They are wondering about trying to find a free parking spot. People looking for parking pollute the environment with car exhaust fumes. So, is there a way to address this issue and reduce adverse effects?

SOLUTION
Our partners created a system to display available parking spaces. This urban IoT solution already helps solve Belgrade traffic congestion, exhaust fume pollution, and noise issues.

Sensors in each parking spot are connected to a communication unit. They collect all the information about parking availability and send it to a cloud server. The display board is installed farther from the sensors, so they opted for a 4G cellular connection provided by Teltonika Networks industrial TRB145 LTE gateway installed within the display housing. TRB145 retrieves the information from the server and passes on the parking space availability data to the display via the RS485 serial interface. The TRB145 gateway design is compact enough to fit inside the display board. Also, TRB145 runs on the open-source operating system — RutOS, allowing for seamless integration with other systems and customization according to the existing infrastructure.

BENEFITS
/TRB145 has a sturdy aluminum housing that resists vibrations near heavy and constant traffic.
/TRB145 has a compact design, perfect for the fast and easy deployment of urban IoT solutions and tight spaces.
/Multiple software features like Firewall, Open VPN, and more, TRB145 for applications where security plays an important role.
/TRB145 provides stable 4G LTE cellular connectivity where a wired connection isn't an option.



RUT200

INDUSTRIAL CELLULAR ROUTER

RUT200 is a compact-sized industrial cellular router compatible with the Middle East, Asia, Africa, South America, and CIS networks. Featuring multiple connectivity options (LTE, Wi-Fi, and Ethernet), this model is perfect for quickly setting up primary and backup connectivity with remote management capabilities.

CONNECTIVITY
4G LTE (Cat 4), 3G, 2G

WI-FI
Wireless Access Point with Hotspot functionality

WAN FAILOVER
Automatic switching to available Backup connection

RMS
For remote management, access & VPN services

STANDARD PACKAGE CONTAINS:
RUT200 // 9 W PSU // 2 x LTE antennas (swivel, SMA male) // 1 x WiFi antenna (swivel, RP-SMA male) // RMS Flyer // QSG (Quick Start Guide) // Packaging box

HARDWARE

Mobile	4G/LTE (Cat 4), 3G, 2G
CPU	Mediatek MIPS 24Kc 580 MHz
Storage	16 MB Flash
Memory	128 MB RAM
Powering option	4pin power socket, 9-30 VDC
SIM	1 x External SIM holder (2FF)
Antenna connectors	2 x SMA for mobile, 1 x RP-SMA for WiFi
Ethernet	2 x 10/100 Ethernet ports: 1 x WAN (configurable as LAN), 1 x LAN
WiFi	IEEE 802.11b/g/n, Access point (AP), Station (STA)
Inputs/Outputs	On 4pin socket: 1 x Digital input, 1 x Digital open collector output
Status LEDs	3 x Connection type, 5 x Signal strength, 2 x Ethernet, 1 x Power
Operating temperature	-40 °C to 75 °C
Housing	Aluminium housing with DIN rail mounting option, plastic panels
Dimensions (W x H x D)	83 x 25 x 74 mm
Weight	125 g

SOFTWARE

Operating system	RutOS (OpenWrt based Linux OS)
Mobile features	Auto APN, Band lock
Network protocols	TCP, UDP, IPv4, IPv6, ICMP, NTP, DNS, HTTP, HTTPS, FTP, SMTP, SSLv3, TLS 1.3, ARP, PPP, PPPoE, DHCP, Telnet
Network	Failover (Network backup), VLAN, QoS, Load Balancing
Security	DDOS prevention (SYN flood protection, SSH attack prevention, HTTP/HTTPS attack prevention), Port scan prevention (SYN-FIN, SYN-RST, X-mas, NULL flags, FIN scan attacks)
VPN and tunneling	OpenVPN, IPsec, GRE, PPTP, L2TP, Stunnel, DMVPN, SSTP, ZeroTier, WireGuard
Monitoring and Management	WEB UI, CLI, SSH, CALL, SMS, TR-069, SNMP, JSON-RPC, MQTT, MODBUS, RMS
Connection monitoring	Ping Reboot, Wget reboot, Periodic Reboot, LCP and ICMP for link inspection
Cloud solutions	RMS, FOTA, Azure IoT Hub, Cloud of Things, Cumulocity, ThingWorx
SMS features	SMS status, SMS configuration, Send/Read SMS via HTTP POST/GET, EMAIL to SMS, SMS to HTTP, SMS to SMS, scheduled SMS, SMS autoreply, SMPP
Services	DDNS, VRRP, Wake On Lan (WOL), WEB filter, UPNP, Traffic Logging

RUT240

INDUSTRIAL CELLULAR ROUTER

Compact, robust and powerful device tailored for industrial M2M/IoT applications. RUT240 features two Ethernet ports and a wireless interface with Hotspot functionality. Stable connectivity is ensured with WAN failover, while the RutOS software meets the highest security standards. Compatible with RMS.

CONNECTIVITY
4G LTE (Cat 4), 3G, 2G

WI-FI
Wireless Access Point with Hotspot functionality

WAN FAILOVER
Automatic switching to available Backup connection

RMS
For remote management, access & VPN services

STANDARD PACKAGE CONTAINS:

RUT240 // 9 W PSU // 2 x LTE antennas (swivel, SMA male) // 1 x WiFi antenna (swivel, RP-SMA male) // Ethernet cable (1.5 m) // SIM Adapter kit // RMS Flyer // QSG (Quick Start Guide) // Packaging box

HARDWARE

Mobile	4G/LTE (Cat 4), 3G, 2G
CPU	Atheros, MIPS 24Kc, 400 MHz
Storage	16 MB Flash
Memory	64 MB RAM
Powering option	4pin power socket, 9-30 VDC
SIM	1 x External SIM holder (2FF)
Antenna connectors	2 x SMA for mobile, 1 x RP-SMA for WiFi
Ethernet	2 x 10/100 Ethernet ports: 1 x WAN (configurable as LAN), 1 x LAN
WiFi	IEEE 802.11b/g/n, Access point (AP), Station (STA)
Inputs/Outputs	On 4pin socket: 1 x Digital input, 1 x Digital open collector output
Status LEDs	3 x Connection type, 5 x Signal strength, 2 x Ethernet, 1 x Power
Operating temperature	-40 °C to 75 °C
Housing	Aluminium housing with DIN rail mounting option, plastic panels
Dimensions (W x H x D)	83 x 25 x 74 mm
Weight	125 g

SOFTWARE

Operating system	RutOS (OpenWrt based Linux OS)
Mobile features	Auto APN, Band lock
Network protocols	TCP, UDP, IPv4, IPv6, ICMP, NTP, DNS, HTTP, HTTPS, FTP, SMTP, SSLv3, TLS 1.3, ARP, PPP, PPPoE, DHCP, Telnet
Network	Failover (Network backup), VLAN, QoS, Load Balancing
Security	DDOS prevention (SYN flood protection, SSH attack prevention, HTTP/HTTPS attack prevention), Port scan prevention (SYN-FIN, SYN-RST, X-mas, NULL flags, FIN scan attacks)
VPN and tunneling	OpenVPN, IPsec, GRE, PPTP, L2TP, Stunnel, DMVPN, SSTP, ZeroTier, WireGuard
Monitoring and Management	WEB UI, CLI, SSH, CALL, SMS, TR-069, SNMP, JSON-RPC, MQTT, MODBUS, RMS
Connection monitoring	Ping Reboot, Wget reboot, Periodic Reboot, LCP and ICMP for link inspection
Cloud solutions	RMS, FOTA, Azure IoT Hub, Cloud of Things, Cumulocity, ThingWorx
SMS features	SMS status, SMS configuration, Send/Read SMS via HTTP POST/GET, EMAIL to SMS, SMS to HTTP, SMS to SMS, scheduled SMS, SMS autoreply, SMPP
Services	DDNS, VRRP, Wake On Lan (WOL), WEB filter, UPNP, Traffic Logging

RUT241

INDUSTRIAL CELLULAR ROUTER

Equipped with 4G LTE, Wi-Fi, and two Ethernet ports, RUT241 offers unstoppable connection continuity with automatic WAN failover. Industrial design, compact size, multiple connection interfaces, and compatibility with RMS make this device an excellent fit in numerous IoT and M2M solutions.

CONNECTIVITY
4G LTE (Cat 4), 3G, 2G

WI-FI
Wireless Access Point with Hotspot functionality

WAN FAILOVER
Automatic switching to available Backup connection

RMS
For remote management, access & VPN services

STANDARD PACKAGE CONTAINS:

RUT241 // 9 W PSU // 2 x LTE antennas (swivel, SMA male) // 1 x WiFi antenna (swivel, RP-SMA male) // Ethernet cable (1.5 m) // SIM Adapter kit // RMS Flyer // QSG (Quick Start Guide) // Packaging box

HARDWARE

Mobile	4G/LTE (Cat 4), 3G, 2G
CPU	Mediatek MIPS 24Kc 580 MHz
Storage	16 MB Flash
Memory	128 MB RAM
Powering option	4pin power socket, 9-30 VDC
SIM	1 x External SIM holder (2FF)
Antenna connectors	2 x SMA for mobile, 1 x RP-SMA for WiFi
Ethernet	2 x 10/100 Ethernet ports: 1 x WAN (configurable as LAN), 1 x LAN
WiFi	IEEE 802.11b/g/n, Access point (AP), Station (STA)
Inputs/Outputs	On 4pin socket: 1 x Digital input, 1 x Digital open collector output
Status LEDs	3 x Connection type, 5 x Signal strength, 2 x Ethernet, 1 x Power
Operating temperature	-40 °C to 75 °C
Housing	Aluminium housing with DIN rail mounting option, plastic panels
Dimensions (W x H x D)	83 x 25 x 74 mm
Weight	125 g

SOFTWARE

Operating system	RutOS (OpenWrt based Linux OS)
Mobile features	Auto APN, Band lock
Network protocols	TCP, UDP, IPv4, IPv6, ICMP, NTP, DNS, HTTP, HTTPS, FTP, SMTP, SSLv3, TLS 1.3, ARP, PPP, PPPoE, DHCP, Telnet
Network	Failover (Network backup), VLAN, QoS, Load Balancing
Security	DDOS prevention (SYN flood protection, SSH attack prevention, HTTP/HTTPS attack prevention), Port scan prevention (SYN-FIN, SYN-RST, X-mas, NULL flags, FIN scan attacks)
VPN and tunneling	OpenVPN, IPsec, GRE, PPTP, L2TP, Stunnel, DMVPN, SSTP, ZeroTier, WireGuard
Monitoring and Management	WEB UI, CLI, SSH, CALL, SMS, TR-069, SNMP, JSON-RPC, MQTT, MODBUS, RMS
Connection monitoring	Ping Reboot, Wget reboot, Periodic Reboot, LCP and ICMP for link inspection
Cloud solutions	RMS, FOTA, Azure IoT Hub, Cloud of Things, Cumulocity, ThingWorx
SMS features	SMS status, SMS configuration, Send/Read SMS via HTTP POST/GET, EMAIL to SMS, SMS to HTTP, SMS to SMS, scheduled SMS, SMS autoreply, SMPP
Services	DDNS, VRRP, Wake On Lan (WOL), WEB filter, UPNP, Traffic Logging

RUT360

LTE CAT6 INDUSTRIAL CELLULAR ROUTER

A successor of our best-selling RUT240, RUT360 keeps its compact shape in a rugged aluminum housing but offers more processing power and increased cellular speeds up to 300Mbps with Carrier Aggregation. Unique programming, remote monitoring, and security features make RUT360 perfect for IoT and M2M applications, where secure connectivity is required, but mobile data speeds are limited.

4G LTE CAT 6
Cellular speeds up to 300Mbps with Carrier Aggregation

WI-FI
802.11 b/g/n Wireless Access Point with Hotspot functionality

WAN FAILOVER
Automatic switching to available Backup connection

RMS
For remote management, access & VPN services

STANDARD PACKAGE CONTAINS:

RUT360 // 12 W PSU // 2 x LTE antennas (swivel, SMA male) // 2 x WiFi antennas (swivel, RP-SMA male) // Ethernet cable (1.5 m) // SIM Adapter kit // RMS Flyer // QSG (Quick Start Guide) // Packaging box

HARDWARE

Mobile	4G/LTE (Cat 6), 3G
CPU	Qualcomm, MIPS 24Kc, 650 MHz
Memory	16 MBytes Flash, 128 MBytes RAM
Powering option	4pin power socket, 9-30 VDC
SIM	1 x External SIM holder (2FF)
Antenna connectors	2 x SMA for mobile, 2 x RP-SMA for WiFi
Ethernet	2 x 10/100 Ethernet ports: 1 x WAN (configurable as LAN), 1 x LAN
WiFi	IEEE 802.11b/g/n, Access point (AP), Station (STA)
Inputs/Outputs	On 4pin socket: 2 x Digital input/Digital open collector output (configurable)
Status LEDs	2 x Connection type, 3 x Signal strength, 2 x Ethernet, 1 x Power
Operating temperature	-40 °C to 75 °C
Housing	Aluminium housing with DIN rail mounting option
Dimensions (W x H x D)	100 x 30 x 85 mm
Weight	247 g

SOFTWARE

Operating system	RutOS (OpenWrt based Linux OS)
Mobile features	Auto APN, Band lock
Network protocols	TCP, UDP, IPv4, IPv6, ICMP, NTP, DNS, HTTP, HTTPS, FTP, SMTP, SSLv3, TLS 1.3, ARP, PPP, PPPoE, DHCP, Telnet
Network	Failover (Network backup), VLAN, QoS, Load Balancing
Security	DDOS prevention (SYN flood protection, SSH attack prevention, HTTP/HTTPS attack prevention), Port scan prevention (SYN-FIN, SYN-RST, X-mas, NULL flags, FIN scan attacks)
VPN and tunneling	OpenVPN, IPsec, GRE, PPTP, L2TP, Stunnel, DMVPN, SSTP, ZeroTier, WireGuard
Monitoring and Management	WEB UI, CLI, SSH, CALL, SMS, TR-069, SNMP, JSON-RPC, MQTT, MODBUS, RMS
Connection monitoring	Ping Reboot, Wget reboot, Periodic Reboot, LCP and ICMP for link inspection
Cloud solutions	RMS, FOTA, Azure IoT Hub, Cloud of Things, Cumulocity, ThingWorx
SMS features	SMS status, SMS configuration, Send/Read SMS via HTTP POST/GET, EMAIL to SMS, SMS to HTTP, SMS to SMS, scheduled SMS, SMS autoreply
Services	DDNS, VRRP, Wake On Lan (WOL), WEB filter, UPNP, Traffic Logging

RUT950

INDUSTRIAL CELLULAR ROUTER

RUT950 is a high-performance cellular router featuring dual-SIM, four Ethernet interfaces, and Wi-Fi. The device is designed as a primary or backup internet source to guarantee a reliable connection with high data throughput and data redundancy. RUT950 comes with RutOS software security features and RMS support.

CONNECTIVITY
4G LTE (Cat 4), 3G, 2G

DUAL SIM
With auto failover, backup WAN and other switching scenarios

WI-FI
Wireless Access Point with Hotspot functionality

WAN FAILOVER
Automatic switching to available Backup connection

STANDARD PACKAGE CONTAINS:
RUT950 // 9 W PSU // 2 x LTE antennas (swivel, SMA male) // 2 x WiFi antennas (swivel, RP-SMA male) // Ethernet cable (1.5 m) // SIM Adapter kit // RMS Flyer // QSG (Quick Start Guide) // Packaging box

HARDWARE

Mobile	4G/LTE (Cat 4), 3G, 2G
CPU	Atheros, MIPS 74Kc, 550 MHz
Storage	16 MB Flash
Memory	128 MB RAM
Powering option	4pin power socket, 9-30 VDC
SIM	2 x External SIM holders (2FF)
Antenna connectors	2 x SMA for mobile, 2 x RP-SMA for WiFi
Ethernet	4 x 10/100 Ethernet ports: 1 x WAN (configurable as LAN), 3 x LAN
WiFi	IEEE 802.11b/g/n, Access point (AP), Station (STA)
Inputs/Outputs	On 4pin socket: 1 x Digital input, 1 x Digital open collector output
Status LEDs	1 x Bi-Color connection type, 5 x Signal strength, 4 x Ethernet, 1 x Power
Operating temperature	-40 °C to 75 °C
Housing	Aluminium housing with DIN rail mounting option, plastic panels with flat mounting option
Dimensions (W x H x D)	110 x 50 x 100 mm
Weight	280 g

SOFTWARE

Operating system	RutOS (OpenWrt based Linux OS)
Mobile features	Auto APN, Band lock, SIM switch, Operator black/white list, Data/SMS limits
Network	Failover (Network backup), VLAN, QoS, Load Balancing
Routing	Static routes, Dynamic routes (BGP, OSPFv2, RIPv1/v2, EIGRP, NHRP), Routing rules
VPN and tunneling	OpenVPN, IPsec, GRE, PPTP, L2TP, Stunnel, DMVPN, SSTP, ZeroTier, WireGuard
Monitoring and Management	WEB UI, CLI, SSH, CALL, SMS, TR-069, SNMP, JSON-RPC, MQTT, MODBUS, RMS
Connection monitoring	Ping Reboot, Wget reboot, Periodic Reboot, LCP and ICMP for link inspection
Cloud solutions	RMS, FOTA, Azure IoT Hub, Cloud of Things, Cumulocity, ThingWorx
Hotspot	External/Internal Radius, SMS OTP, MAC authentication, Walled Garden
Supported Hotspot platforms	IronWiFi, HotspotSystem, Cloud4Wi, SAI + WiFi, MugiCloud, Purple.ai
SMS features	SMS status, SMS configuration, Send/Read SMS via HTTP POST/GET, EMAIL to SMS, SMS to HTTP, SMS to SMS, scheduled SMS, SMS autoreply, SMPP
Services	DDNS, VRRP, Wake On Lan (WOL), WEB filter, UPNP, Traffic Logging

RUT951

INDUSTRIAL CELLULAR ROUTER

RUT951 features dual-SIM cellular connectivity combined with Wi-Fi and four Ethernet interfaces to meet the needs of the most varied IoT scenarios. Powered by RutOS, this router offers advanced customization options, automation features, and top-level security for your solution.

CONNECTIVITY
4G LTE (Cat 4), 3G, 2G

DUAL SIM
With auto failover, backup WAN and other switching scenarios

WI-FI
Wireless Access Point with Hotspot functionality

WAN FAILOVER
Automatic switching to available Backup connection

STANDARD PACKAGE CONTAINS:

RUT951 // 9 W PSU // 2 x LTE antennas (swivel, SMA male) // 2 x WiFi antennas (swivel, RP-SMA male) // Ethernet cable (1.5 m) // SIM Adapter kit // RMS Flyer // QSG (Quick Start Guide) // Packaging box

HARDWARE

Mobile	4G/LTE (Cat 4), 3G, 2G
CPU	Mediatek MIPS 24Kc 580 MHz
Storage	16 MB Flash
Memory	128 MB RAM
Powering option	4pin power socket, 9-30 VDC
SIM	2 x External SIM holders (2FF)
Antenna connectors	2 x SMA for mobile, 2 x RP-SMA for WiFi
Ethernet	4 x 10/100 Ethernet ports: 1 x WAN (configurable as LAN), 3 x LAN
WiFi	IEEE 802.11b/g/n, Access point (AP), Station (STA)
Inputs/Outputs	On 4pin socket: 1 x Digital input, 1 x Digital open collector output
Status LEDs	1 x Bi-Color connection type, 5 x Signal strength, 4 x Ethernet, 1 x Power
Operating temperature	-40 °C to 75 °C
Housing	Aluminium housing with DIN rail mounting option, plastic panels with flat mounting option
Dimensions (W x H x D)	110 x 50 x 100 mm
Weight	287 g

SOFTWARE

Operating system	RutOS (OpenWrt based Linux OS)
Mobile features	Auto APN, Band lock, SIM switch, Operator black/white list, Data/SMS limits
Network	Failover (Network backup), VLAN, QoS, Load Balancing
Routing	Static routes, Dynamic routes (BGP, OSPFv2, RIPv1/v2, EIGRP, NHRP), Routing rules
VPN and tunneling	OpenVPN, IPsec, GRE, PPTP, L2TP, Stunnel, DMVPN, SSTP, ZeroTier, WireGuard
Monitoring and Management	WEB UI, CLI, SSH, CALL, SMS, TR-069, SNMP, JSON-RPC, MQTT, MODBUS, RMS
Connection monitoring	Ping Reboot, Wget reboot, Periodic Reboot, LCP and ICMP for link inspection
Cloud solutions	RMS, FOTA, Azure IoT Hub, Cloud of Things, Cumulocity, ThingWorx
Hotspot	External/Internal Radius, SMS OTP, MAC authentication, Walled Garden
Supported Hotspot platforms	IronWiFi, HotspotSystem, Cloud4Wi, SAI + WiFi, MugiCloud, Purple.ai
SMS features	SMS status, SMS configuration, Send/Read SMS via HTTP POST/GET, EMAIL to SMS, SMS to HTTP, SMS to SMS, scheduled SMS, SMS autoreply, SMPP
Services	DDNS, VRRP, Wake On Lan (WOL), WEB filter, UPNP, Traffic Logging

RUT955

INDUSTRIAL CELLULAR ROUTER

RUT955 offers a dual-SIM cellular connection, four Ethernet ports, and Wi-Fi combined with RS232, RS485, USB interfaces, and inputs/outputs for an incredible variety of professional application scenarios. This router comes with RutOS advanced software features such as Modbus, SNMP, TR-069, NTRIP, MQTT protocol support, and GNSS tracking capabilities.

CONNECTIVITY
4G LTE (Cat 4), 3G, 2G

DUAL SIM
With auto failover, backup WAN and other switching scenarios

MULTIPLE INTERFACES
Ethernet, Serial (RS232, RS485) and multiple Inputs/Outputs for any industrial connectivity use case

GNSS
Global Navigation Satellite System for location services and time synchronization

STANDARD PACKAGE CONTAINS:
RUT955 // 9 W PSU // 2 x LTE antennas (magnetic mount, SMA male, 3 m cable) // 2 x WiFi antennas (magnetic mount, RP-SMA male, 1.5 m cable) // GNSS antenna (adhesive , SMA male, 3 m cable) // RS485 connector block // I/O connector block // Ethernet cable (1.5 m) // SIM Adapter kit // QSG (Quick Start Guide) // Packaging box

HARDWARE

Mobile	4G/LTE (Cat 4), 3G, 2G
CPU	Atheros, MIPS 74Kc, 550 MHz
Storage	16 MB Flash
Memory	128 MB RAM
Powering option	4pin power socket, 9-30 VDC
SIM	2 x External SIM holders (2FF)
Antenna connectors	2 x SMA for mobile, 2 x RP-SMA for WiFi, 1 x SMA for GPS
Ethernet	4 x 10/100 Ethernet ports: 1 x WAN (configurable as LAN), 3 x LAN
WiFi	IEEE 802.11b/g/n, Access point (AP), Station (STA)
GNSS	GPS, GLONASS, BeiDou, Galileo, QZSS
Inputs/Outputs	On 4pin socket: 1 x Digital input, 1 x Digital open collector output On 10pin socket: 1 x Isolated digital input, 1 x Digital dry input, 1 x Analog input, 1 x Isolated open collector output (requires external voltage), 1 x Relay output (non-latching)
Serial	1 x RS232, 1 x RS485
Other	1 x USB host, 1 x MicroSD
Status LEDs	1 x Bi-Color connection type, 5 x Signal strength, 4 x Ethernet, 1 x Power
Operating temperature	-40 °C to 75 °C
Housing	Aluminium housing with DIN rail mounting option, plastic panels with flat mounting option
Dimensions (W x H x D)	110 x 50 x 100 mm
Weight	287 g

SOFTWARE

Operating system	RutOS (OpenWrt based Linux OS)
Mobile features	Band lock, SIM switch, Operator black/white list, Data/SMS limits
Network	Failover (Network backup), VLAN, QoS, Load Balancing
Monitoring and Management	WEB UI, CLI, SSH, CALL, SMS, TR-069, SNMP, JSON-RPC, MQTT, MODBUS, RMS
Cloud solutions	RMS, FOTA, Azure IoT Hub, Cloud of Things, Cumulocity, ThingWorx
NTP	NTP Server, NTP Client, Sync with: External NTP server, GNSS, Mobile operator
GNSS	NMEA forwarding, AVL, Geofencing
Modbus	TCP slave, TCP master, RTU master, RTU gateway, Modbus over MQTT
Serial	Console, Over IP, Modem, NTRIP, Modbus

RUT956

INDUSTRIAL CELLULAR ROUTER

RUT956 is an industrial router that combines cellular, Wi-Fi, and wired connectivity options with automatic WAN failover and GNSS capabilities. Serial communication interfaces enable integrating more varied devices into the solution ecosystem, while I/O and advanced RutOS software facilitate equipment control, automation, and event notifications.

CONNECTIVITY
4G LTE (Cat 4), 3G, 2G

DUAL SIM
With auto failover, backup WAN and other switching scenarios

MULTIPLE INTERFACES
Ethernet, Serial (RS232, RS485) and multiple Inputs/Outputs for any industrial connectivity use case

GNSS
Global Navigation Satellite System for location services and time synchronization

STANDARD PACKAGE CONTAINS:
RUT956 // 9 W PSU // 2 x LTE antennas (magnetic mount, SMA male, 3 m cable) // 2 x WiFi antennas (magnetic mount, RP-SMA male, 1.5 m cable) // GNSS antenna (adhesive , SMA male, 3 m cable) // RS485 connector block // I/O connector block // Ethernet cable (1.5 m) // SIM Adapter kit // QSG (Quick Start Guide) // Packaging box

HARDWARE

Mobile	4G/LTE (Cat 4), 3G, 2G
CPU	Mediatek MIPS 24Kc 580 MHz
Storage	16 MB Flash
Memory	128 MB RAM
Powering option	4pin power socket, 9-30 VDC
SIM	2 x External SIM holders (2FF)
Antenna connectors	2 x SMA for mobile, 2 x RP-SMA for WiFi, 1 x SMA for GPS
Ethernet	4 x 10/100 Ethernet ports: 1 x WAN (configurable as LAN), 3 x LAN
WiFi	IEEE 802.11b/g/n, Access point (AP), Station (STA)
GNSS	GPS, GLONASS, BeiDou, Galileo, QZSS
Inputs/Outputs	On 4pin socket: 1 x Digital input, 1 x Digital open collector output On 10pin socket: 1 x Isolated digital input, 1 x Digital dry input, 1 x Analog input, 1 x Isolated open collector output (requires external voltage), 1 x Relay output (non-latching)
Serial	1 x RS232, 1 x RS485
Other	1 x USB host
Status LEDs	1 x Bi-Color connection type, 5 x Signal strength, 4 x Ethernet, 1 x Power
Operating temperature	-40 °C to 75 °C
Housing	Aluminium housing with DIN rail mounting option, plastic panels with flat mounting option
Dimensions (W x H x D)	110 x 50 x 100 mm
Weight	287 g

SOFTWARE

Operating system	RutOS (OpenWrt based Linux OS)
Mobile features	Band lock, SIM switch, Operator black/white list, Data/SMS limits
Network	Failover (Network backup), VLAN, QoS, Load Balancing
Monitoring and Management	WEB UI, CLI, SSH, CALL, SMS, TR-069, SNMP, JSON-RPC, MQTT, MODBUS, RMS
Cloud solutions	RMS, FOTA, Azure IoT Hub, Cloud of Things, Cumulocity, ThingWorx
NTP	NTP Server, NTP Client, Sync with: External NTP server, GNSS, Mobile operator
GNSS	NMEA forwarding, AVL, Geofencing
Modbus	TCP slave, TCP master, RTU master, RTU gateway, Modbus over MQTT
Serial	Console, Over IP, Modem, NTRIP, Modbus

RUTX09

INDUSTRIAL CELLULAR ROUTER

RUTX09 is an LTE-A Cat 6 cellular IoT router with dual-SIM, Carrier Aggregation, and four Gigabit Ethernet interfaces. Designed as a primary or backup internet source, it can offer up to 300 Mbps cellular speeds, with high data throughput.

4G LTE CAT 6

Cellular speeds up to 300Mbps with Carrier Aggregation

DUAL SIM

With auto failover, backup WAN and other switching scenarios

GIGABIT ETH

4 x Gigabit Ethernet ports with up to 128 port/tag-based VLANs supported

GNSS

Global Navigation Satellite System for location services and time synchronization

STANDARD PACKAGE CONTAINS:

RUTX09 // 18 W PSU // 2 x LTE antennas (swivel, SMA male) // 1 x GNSS antenna (adhesive, SMA male, 3 m cable) // SIM Adapter kit // Ethernet cable (1.5 m) // RMS Flyer // QSG (Quick Start Guide) // Packaging box

HARDWARE

Mobile	4G/LTE (Cat 6), 3G
CPU	Qualcomm, 4 x ARM Cortex A7, 717 MHz
Storage	256 MB Flash
Memory	256 MB RAM
Powering option	4pin power socket, 9-50 VDC
SIM	2 x External SIM holders (2FF)
Antenna connectors	2 x SMA for mobile, 1 x SMA for GPS
Ethernet	4 x 10/100/1000 Ethernet ports: 1 x WAN (configurable as LAN), 3 x LAN
GNSS	GPS, GLONASS, BeiDou, Galileo, QZSS
Inputs/Outputs	On 4pin socket: 1 x Digital input, 1 x Digital open collector output
Other	1 x USB host
Status LEDs	3 x WAN type, 2 x Connection type, 5 x Signal strength, 8 x Ethernet, 1 x Power
Operating temperature	-40 °C to 75 °C
Housing	Aluminium housing with DIN rail mounting option and grounding capability
Dimensions (W x H x D)	115 x 44.2 x 95.1 mm
Weight	455 g

SOFTWARE

Operating system	RutOS (OpenWrt based Linux OS)
Mobile features	Multiple PDN, Auto APN, Band lock, SIM switch, Operator black/white list, Data/SMS limits
Network protocols	TCP, UDP, IPv4, IPv6, ICMP, NTP, DNS, HTTP, HTTPS, FTP, SMTP, SSLv3, TLS 1.3, ARP, PPP, PPPoE, DHCP, Telnet
Network	Failover (Network backup), VLAN, QoS, Load Balancing
VPN and tunneling	OpenVPN, IPsec, GRE, PPTP, L2TP, Stunnel, DMVPN, SSTP, WireGuard, ZeroTier
Monitoring and Management	WEB UI, CLI, SSH, CALL, SMS, TR-069, SNMP, JSON-RPC, MQTT, MODBUS, RMS
Cloud solutions	RMS, FOTA, Azure IoT Hub, Cloud of Things, Cumulocity, ThingWorx
NTP	NTP Server, NTP Client, Sync with: External NTP server, GNSS, Mobile operator
GNSS	NMEA forwarding, AVL, Geofencing
Services	DDNS, VRRP, Wake On Lan (WOL), WEB filter, UPNP, Network shares (Samba), Traffic Logging
Administration	Multi user, Configuration profiles, Diagnostics, logs, Configuration backup

RUTX11

INDUSTRIAL CELLULAR ROUTER

This powerful LTE Cat 6 cellular industrial router is designed for professional applications requiring reliable, fast connection and high data throughput. It is equipped with four Gigabit Ethernet ports, AC Wi-Fi, Bluetooth LE, and comes with remote management capabilities of RMS.

4G LTE CAT 6

Cellular speeds up to 300Mbps with Carrier Aggregation

DUAL SIM

With auto failover, backup WAN and other switching scenarios

WI-FI & BT

Wave-2 802.11ac Dual Band WIFI and Bluetooth LE

GIGABIT ETH

4 x Gigabit Ethernet ports with up to 128 port/tag-based VLANs supported

STANDARD PACKAGE CONTAINS:

RUTX11 // 18 W PSU // 2 x LTE antennas (swivel, SMA male) // 2 x WiFi antennas (swivel, RP-SMA male) // 1 x GNSS antenna (adhesive, SMA male, 3 m cable) // 1 x Bluetooth antenna (magnetic mount, RP-SMA male, 1.5 m cable) // SIM Adapter kit // Ethernet cable (1.5 m) // RMS Flyer // QSG (Quick Start Guide) // Packaging box

HARDWARE

Mobile	4G/LTE (Cat 6), 3G
CPU	Qualcomm, 4 x ARM Cortex A7, 717 MHz
Storage	256 MB Flash
Memory	256 MB RAM
Powering option	4pin power socket, 9-50 VDC
SIM	2 x External SIM holders (2FF)
Antenna connectors	2 x SMA for mobile, 2 x RP-SMA for WiFi, 1 x RP-SMA for Bluetooth, 1 x SMA for GPS
Ethernet	4 x 10/100/1000 Ethernet ports: 1 x WAN (configurable as LAN), 3 x LAN
WiFi	IEEE 802.11b/g/n 2.4GHz, IEEE 802.11ac/n/a 5GHz, Access point (AP), Station (STA)
GNSS	GPS, GLONASS, BeiDou, Galileo, QZSS
Bluetooth	4.0 (Low energy)
Inputs/Outputs	On 4pin socket: 1 x Digital input, 1 x Digital open collector output
Other	1 x USB host
Status LEDs	4 x WAN type, 2 x Connection type, 5 x Signal strength, 2 x WiFi, 8 x Ethernet, 1 x Power
Operating temperature	-40 °C to 75 °C
Housing	Aluminium housing with DIN rail mounting option and grounding capability
Dimensions	115 x 44.2 x 95.1 mm
Weight	456 g

SOFTWARE

Operating system	RutOS (OpenWrt based Linux OS)
Mobile features	Multiple PDN, Auto APN, Band lock, SIM switch, Operator black/white list, Data/SMS limits
Network	Failover (Network backup), VLAN, QoS, Load Balancing
Routing	Static routes, Dynamic routes (BGP, OSPFv2, RIPv1/v2, EIGRP, NHRP), Routing rules
VPN and tunneling	OpenVPN, IPsec, GRE, PPTP, L2TP, Stunnel, DMVPN, SSTP, WireGuard, ZeroTier
Cloud solutions	RMS, FOTA, Azure IoT Hub, Cloud of Things, Cumulocity, ThingWorx
Hotspot	External/Internal Radius, SMS OTP, MAC authentication, Walled Garden
NTP	NTP Server, NTP Client, Sync with: External NTP server, GNSS, Mobile operator
GNSS	NMEA forwarding, AVL, Geofencing

RUTX12

DUAL LTE CAT 6 INDUSTRIAL CELLULAR ROUTER

This powerful dual LTE Cat 6 router is a great fit for mission-critical applications. Two cellular modems for dual simultaneous connections, seamless mobile service switching and load balancing features make this device irreplaceable in applications where losing connection is not an option.

DUAL LTE
Cellular speeds up to 600Mbps with dual simultaneous LTE CAT 6 connections

DUAL SIM
Instant failover switching

WI-FI & BT
Wave-2 802.11ac Dual Band WIFI and Bluetooth LE

LOAD BALANCING
Allows to use multiple WAN sources to increase throughput

STANDARD PACKAGE CONTAINS:
RUTX12 // 24 W PSU // 4 x LTE antennas (swivel, SMA male) // 2 x WiFi antennas (magnetic mount, RP-SMA male, 1.5 m cable) // 1 x GNSS antenna (adhesive, SMA male, 3 m cable) // 1 x Bluetooth antenna (magnetic mount, RP-SMA male, 1.5 m cable) // SIM Adapter kit // Ethernet cable (1.5 m) // RMS Flyer // QSG (Quick Start Guide) // Packaging box

HARDWARE

Mobile	2 X 4G/LTE (Cat 6), 3G
CPU	Qualcomm, 4 x ARM Cortex A7, 717 MHz
Storage	256 MB Flash
Memory	256 MB RAM
Powering option	4pin power socket, 9-50 VDC
SIM	2 x External SIM holders (2FF)
Antenna connectors	4 x SMA for mobile, 2 x RP-SMA for WiFi, 1 x RP-SMA for Bluetooth, 1 x SMA for GPS
Ethernet	5 x 10/100/1000 Ethernet ports: 1 x WAN (configurable as LAN), 4 x LAN
WiFi	IEEE 802.11b/g/n 2.4GHz, IEEE 802.11ac/n/a 5GHz, Access point (AP), Station (STA)
GNSS	GPS, GLONASS, BeiDou, Galileo, QZSS
Bluetooth	4.0 (Low energy)
Inputs/Outputs	On 4pin socket: 1 x Digital input, 1 x Digital open collector output
Other	1 x USB host
Status LEDs	4 x WAN type, 6 x Connection type, 6 x Signal strength, 2 x WiFi, 10 x Ethernet, 1 x Power
Operating temperature	-40 °C to 75 °C
Housing	Aluminium housing with DIN rail mounting option and grounding capability
Dimensions (W x H x D)	132 x 44.2 x 95.1 mm
Weight	540 g

SOFTWARE

Operating system	RutOS (OpenWrt based Linux OS)
Mobile features	Multiple PDN, Auto APN, Band lock, SIM switch, Operator black/white list, Data/SMS limits
Network	Failover (Network backup), VLAN, QoS, Load Balancing
Routing	Static routes, Dynamic routes (BGP, OSPFv2, RIPv1/v2, EIGRP, NHRP), Routing rules
Monitoring and Management	WEB UI, CLI, SSH, CALL, SMS, TR-069, SNMP, JSON-RPC, MQTT, MODBUS, RMS
Cloud solutions	RMS, FOTA, Azure IoT Hub, Cloud of Things, Cumulocity, ThingWorx
Hotspot	External/Internal Radius, SMS OTP, MAC authentication, Walled Garden
Supported Hotspot platforms	IronWiFi, HotspotSystem, Cloud4Wi, SAI + WiFi, MugiCloud, Purple.ai

RUTX14

4G LTE CAT 12 INDUSTRIAL CELLULAR ROUTER

RUTX14 is the fastest single modem LTE-A Cat 12 router in the Teltonika Networks product range. With two SIM cards, Wave-2 dual-band Wi-Fi, five Gigabit Ethernet ports, and automatic failover, you may expect high compatibility, unbeatable network resilience, and exceptional speed.

4G LTE CAT12

Incredible download & upload speeds with carrier aggregation (up to 600 Mbps / 150 Mbps respectively)

DUAL SIM

With auto failover, backup WAN and other switching scenarios

WI-FI & BT

Wave-2 802.11ac Dual Band WIFI and Bluetooth LE

GIGABIT ETH

5 x Gigabit Ethernet ports with up to 128 port/tag-based VLANs supported

STANDARD PACKAGE CONTAINS:

RUTX14 // 24 W PSU // 4 x LTE antennas (swivel, SMA male) // 2 x WiFi antennas (magnetic mount, RP-SMA male, 1.5 m cable) // 1 x GNSS antenna (adhesive, SMA male, 3 m cable) // 1 x Bluetooth antenna (magnetic mount, RP-SMA male, 1.5 m cable) // SIM Adapter kit // Ethernet cable (1.5 m) // RMS Flyer // QSG (Quick Start Guide) // Packaging box

HARDWARE

Mobile	4G/LTE (Cat 12)
CPU	Qualcomm, 4 x ARM Cortex A7, 717 MHz
Storage	256 MB Flash
Memory	256 MB RAM
Powering option	4 pin power socket, 9-50 VDC
SIM	2 x External SIM holders (2FF)
Antenna connectors	4 x SMA for mobile, 2 x RP-SMA for WiFi, 1 x RP-SMA for Bluetooth, 1 x SMA for GPS
Ethernet	5 x 10/100/1000 Ethernet ports: 1 x WAN (configurable as LAN), 4 x LAN
WiFi	IEEE 802.11b/g/n 2.4GHz, IEEE 802.11n/ac 5GHz, Access point (AP), Station (STA)
GNSS	GPS, GLONASS, BeiDou, Galileo, QZSS
Connectors	1 x 4 pin DC, 5 x Ethernet, 4 x SMA for LTE, 2 x WiFi RP-SMA, 1 x SMA for GNSS, 1 x RP-SMA for Bluetooth
Bluetooth	4.0 (Low energy)
Inputs/Outputs	On 4 pin socket: 1 x Digital input, 1 x Digital open collector output
Other	1 x USB host, 1 x Grounding screw
Status LEDs	4 x WAN type, 2 x Connection type, 3 x Signal strength, 2 x WiFi, 10 x Ethernet, 1 x Power
Operating temperature	-40 °C to 75 °C
Housing	Aluminium housing with DIN rail mounting option and grounding capability
Dimensions (W x H x D)	132 x 44.2 x 95.1 mm
Weight	515 g

SOFTWARE

Operating system	RutOS (OpenWrt based Linux OS)
Mobile features	Multiple PDN, Auto APN, Band lock, SIM switch, Operator black/white list, Data/SMS limits
Network	Failover (Network backup), VLAN, QoS, Load Balancing
Routing	Static routes, Dynamic routes (BGP, OSPFv2, RIPv1/v2, EIGRP, NHRP), Routing rules
Monitoring and Management	WEB UI, CLI, SSH, CALL, SMS, TR-069, SNMP, JSON-RPC, MQTT, MODBUS, RMS
Cloud solutions	RMS, FOTA, Azure IoT Hub, Cloud of Things, Cumulocity, ThingWorx
Hotspot	External/Internal Radius, SMS OTP, MAC authentication, Walled Garden
Supported Hotspot platforms	IronWiFi, HotspotSystem, Cloud4Wi, SAI + WiFi, MugiCloud, Purple.ai

RUTXR1

ENTERPRISE SFP/LTE RACK MOUNT READY ROUTER

The first rack-mountable LTE Cat 6 router in the Teltonika Networks portfolio comes with redundant power supplies, WAN failover, dual-SIM, SFP, USB, and dedicated console ports. This feature-rich device with highly customizable and powerful RutOS is perfect where a fast and ultra-reliable connection is needed.

4G LTE CAT 6

Cellular speeds up to 300Mbps with Carrier Aggregation

SFP

SFP port for long-range Fiber-optic communication

WI-FI

Wave-2 802.11ac Dual Band WIFI

DUAL POWER

Dual Power supply compatibility ensures uninterrupted service

STANDARD PACKAGE CONTAINS:

RUTXR1 // 18 W PSU // 2 x LTE antennas (magnetic mount, SMA male, 3 m cable) // 2 x WiFi antennas (magnetic mount, RP-SMA male, 1.5 m cable) // 1Rack - mounting kit // 4 x Standing pads // 8 x Screws // SIM Adapter kit // Ethernet cable (1.5 m) // RMS Flyer // QSG (Quick Start Guide) // Packaging box

HARDWARE

Mobile	4G/LTE (Cat 6), 3G
CPU	QualcomStorageARM Cortex A7, 717 MHz
Storage	256 MB Flash
Memory	256 MB RAM
Powering option	4pin power socket, 9-50 VDC (main) 4pin power socket, 9-50 VDC (redundant)
SIM	2 x External SIM holders (2FF)
Antenna connectors	2 x SMA for mobile, 2 x RP-SMA for WiFi
Ethernet	5 x 10/100/1000 Ethernet ports: 1 x WAN (configurable as LAN), 4 x LAN
WiFi	IEEE 802.11a/b/g/n/ac 2.4GHz/5GHz, Access point (AP), Station (STA)
Other	1 x USB host, 1 x SFP, 1 x RS232 console
Status LEDs	2 x WAN type, 2 x Connection type, 3 x Signal strength, 2 x SIM, 2 x Console, 10 x Ethernet, 2 x Power
Operating temperature	-40 °C to 75 °C
Housing	Full aluminium rack unit housing with grounding capability
Dimensions (W x H x D)	272 x 42.6 x 122.6 mm
Weight	1050 g

SOFTWARE

Operating system	RutOS (OpenWrt based Linux OS)
Mobile features	Multiple PDN, Auto APN, Band lock, SIM switch, Operator black/white list, Data/SMS limits
Network protocols	TCP, UDP, IPv4, IPv6, ICMP, NTP, DNS, HTTP, HTTPS, FTP, SMTP, SSLv3, TLS 1.3, ARP, PPP, PPPoE, DHCP, Telnet
Network	Failover (Network backup), VLAN, QoS, Load Balancing
Routing	Static routes, Dynamic routes (BGP, OSPFv2, RIPv1/v2, EIGRP, NHRP), Routing rules
VPN and tunneling	OpenVPN, IPsec, GRE, PPTP, L2TP, Stunnel, DMVPN, SSTP, WireGuard, ZeroTier
Monitoring and Management	WEB UI, CLI, SSH, CALL, SMS, TR-069, SNMP, JSON-RPC, MQTT, MODBUS, RMS
Cloud solutions	RMS, FOTA, Azure IoT Hub, Cloud of Things, Cumulocity, ThingWorx
Services	DDNS, VRRP, Wake On Lan (WOL), WEB filter, UPNP, Network shares (Samba), Traffic Logging

TCR100

4G Wi-Fi ROUTER FOR HOME USER

Extensive industrial IoT experience brought to our home users. This LTE-A Cat 6 router also offers dual-band Wi-Fi and two Ethernet ports to connect devices. Featuring Wi-Fi and Wi-Fi Protected buttons for quick setup, this router is simple to use yet enables high customizability for advanced users with RutOS.

4G LTE-ADVANCED

LTE CAT6 enables cellular speeds up to 300Mbps with carrier aggregation

WI-FI

Dual-Band with 2.4 GHz & 5.0 GHz frequencies

SECURE

Firewall and numerous VPN services including OpenVPN, IPsec, PPTP, L2TP & DMVPN

RUTOS

Powerful OS with intuitive UI based on OpenWrt empowers endless configuration possibilities.

STANDARD PACKAGE CONTAINS:

TCR100 // 18 W PSU // 2 x LTE antennas (swivel, SMA male) // SIM Adapter kit // Ethernet cable (1.5 m) // RMS Flyer // QSG (Quick Start Guide) // Packaging box

HARDWARE

Mobile	4G/LTE (Cat 6), 3G
CPU	Qualcomm, MIPS 24Kc, 650 MHz
Memory	16 MBytes Flash, 128 MBytes RAM
Powering option	4pin power socket, 9-30 VDC
SIM	1 x External SIM holder (2FF)
Antenna connectors	2 x SMA for mobile
Ethernet	2 x 10/100 Ethernet ports: 1 x WAN (configurable as LAN), 1 x LAN
WiFi	2.4 GHz (802.11 b/g/n, 2x2 MIMO), 5 GHz (802.11 ac, 1x1 MIMO), Access Point (AP), Station (STA)
Status LEDs	1 x Internet, 1 x WiFi, 3 x Mobile connection strength, 2 x Ethernet status
Operating temperature	-40 °C to 75 °C
Housing	Plastic housing with aluminum screws and heatsink
Dimensions (W x H x D)	150 x 37 x 105 mm
Weight	376 g

SOFTWARE

Operating system	RutOS (OpenWrt based Linux OS)
Mobile features	Auto APN, Band lock
Network protocols	TCP, UDP, IPv4, IPv6, ICMP, NTP, DNS, HTTP, HTTPS, FTP, SMTP, SSLv3, TLS 1.3, ARP, PPP, PPPoE, DHCP, Telnet
Network	Failover (Network backup), VLAN, QoS, Load Balancing
Security	DDOS prevention (SYN flood protection, SSH attack prevention, HTTP/HTTPS attack prevention), Port
VPN and tunneling	OpenVPN, IPsec, GRE, PPTP, L2TP, Stunnel, DMVPN, SSTP, ZeroTier, WireGuard
Monitoring and Management	WEB UI, CLI, SSH, CALL, SMS, TR-069, SNMP, JSON-RPC, MQTT, MODBUS, RMS
Connection monitoring	Ping Reboot, Wget reboot, Periodic Reboot, LCP and ICMP for link inspection
Cloud solutions	RMS, FOTA, Azure IoT Hub, Cloud of Things, Cumulocity, ThingWorx
SMS features	SMS status, SMS configuration, Send/Read SMS via HTTP POST/GET, EMAIL to SMS, SMS to Email, SMS to HTTP, SMS to SMS, scheduled SMS, SMS autoreply
Services	DDNS, VRRP, Wake On Lan (WOL), WEB filter, UPNP, Traffic Logging

SAFE AND SIMPLE TO SET UP HOME NETWORK WITH TCR100

// SMART CITY

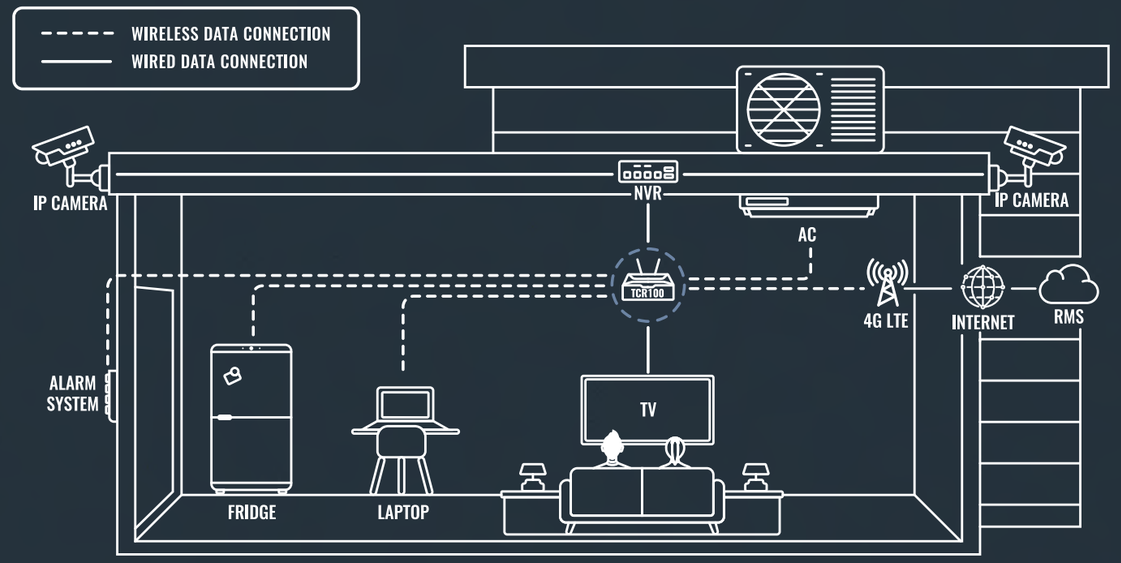
Our households continue transforming into living and breathing technological ecosystems as more smart devices enter our lives. You may have an automated conditioning system that only turns on at certain times to save energy or turn on your robot vacuum cleaner while at work. That is no longer science fiction but a current-day reality.

SOLUTION
With the first-ever consumer router from Teltonika Networks, you get a user-friendly solution for setting up your home connectivity. Even in remote areas, you can enjoy stable internet, as TCR100 offers 4G cellular connectivity without compromising your speed. It is a perfect choice, even when a wired connection is impossible.

In this use case, two Ethernet ports accommodate a smart TV and an NVR that stores video feed from connected IP cameras. The rest of the devices like a smart fridge, laptop, AC, and alarm systems connect to the network wirelessly. The data from connected equipment can be helpful to optimize your IoT setup. Unlike standard home routers, the TCR100 can support over 50 devices simultaneously, thanks to the applied know-how from the industrial sector.

TCR100 is easy to set up. It features Wi-Fi and Wi-Fi Protected buttons for wireless network access within a click. Besides, a user-friendly WebUI provides rich customization options, a pre-configured firewall, and guest Wi-Fi to ensure the security of your home network. On top of that, periodical firmware updates eliminate vulnerabilities and bring new functionality.

BENEFITS
/4G Cat6 technology and Dual-band Wi-Fi offer excellent wireless performance for all connected devices, even in remote locations.
/RutOS is friendly for newcomers yet full of customization possibilities for advanced users.
/TCR100 is simple to set up, even for beginners.
/This model has Wi-Fi and Wi-Fi Protected buttons for easy wireless network access.
/TCR100 receives periodical firmware downloads, bringing enhanced security and new features to your home router.



WIRELESS BROADBAND CONNECTIVITY FOR GAS STATIONS

// RETAIL

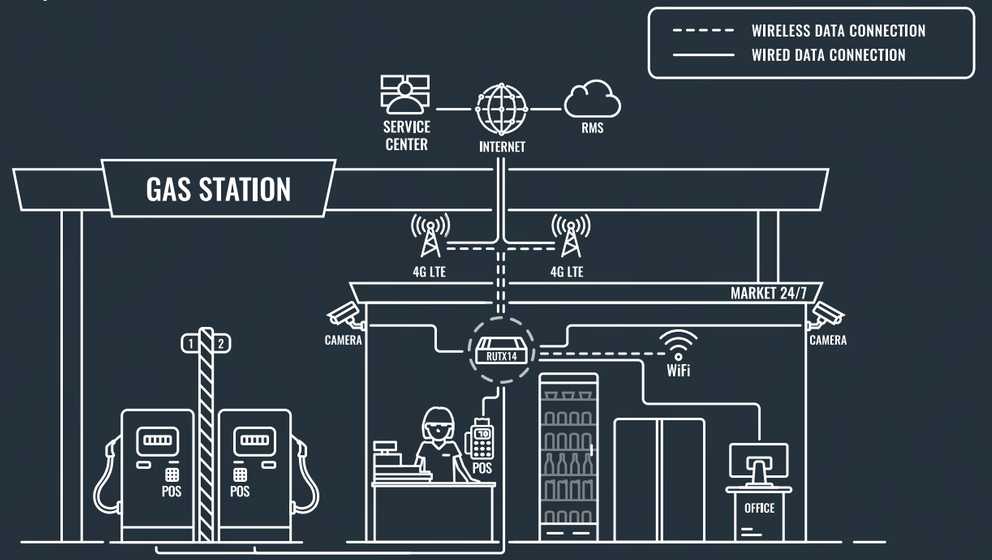
Despite growing awareness regarding global warming and the greenhouse effect, gasoline and diesel remain the most common fuels today. Besides, the times when gas stations had only one purpose of supplying gasoline been long gone. Nowadays, they are multifunctional zones that often include convenience stores, cafes, resting areas, restrooms, and more. The number of gas stations is still growing in a lot of places around the world: some are in the cities and some - in remote areas. This variety comes with a set of connectivity challenges.

SOLUTION
RUTX14 router is the central piece of this solution. This first-ever LTE Cat 12 cellular router in our portfolio enables quick and easy deployment in any situation, even in remote areas. Opting for wireless cellular connectivity reduces the complexity of the solution, so it takes significantly less time and installation resources. Cat 12 router can reach speeds up to 600 Mbps, which is enough to serve the varied needs of devices used in similar environments.

Surveillance cameras inside and outside the petrol station, Points of Sale (POS), digital signage screens require speedy connection, network stability, and broad data bandwidth. These devices connect to the router via Ethernet cables through five available Gigabit ports available on RUTX14. Product scanners, tablets, and other wireless devices used for work purposes connect to a private WIFI network for security reasons. There is a separate public Guest WIFI created for the visitors. A wide selection of VPN services ensures that the most varied security requirements and preferences are met.

For an even more simplified solution, our TSW100 switch can power up the cameras via PoE. Compatibility with RMS and various other IoT platforms enables remote accessibility for IT support teams and various integrators to prevent any downtime and solve issues immediately and cost-efficiently.

BENEFITS
/Speedy connection with download speeds up to 600 Mbps and upload speeds up to 150 Mbps.
/Quick and straightforward setup for an all-in-one solution to connect an ecosystem of multiple devices.
/Multiple WANs and various VPNs to secure your network.
/Remote management and monitoring via RMS or a variety of third-party IoT platforms.



ETHERNET & WIRELESS

SWITCHES // ROUTERS

Ethernet & Wireless division comprises a selection of high-quality switches and routers. These products are designed with professional application scenarios in mind, where sturdy and reliable products are required for highly secure enterprise, IoT, and M2M solutions. They provide multiple interfaces for a quick infrastructure setup, even with large device ecosystems.

TSW100

INDUSTRIAL UNMANAGED POE+ SWITCH

TSW100 is an unmanaged Gigabit Ethernet switch supporting Power-over-Ethernet. Classified as power source equipment (PSE), it centralizes the power supply, providing up to 30 watts per port and reducing installation effort. Five Gigabit Ethernet ports provide an economical high-bandwidth solution for a secure industrial Ethernet network.

PoE
4 x PoE ports with 802.3af and 802.3at support

POWER BUDGET
Total power budget at PSE up to 120 W

ETHERNET
5 x Gigabit Ethernet with speeds up to 1000 Mbps

MOUNTING
DIN rail and surface mounting options

STANDARD PACKAGE CONTAINS:
TSW100 // 65 W PSU // QSG (Quick Start Guide) // Packaging box

HARDWARE

Powering option	4pin power socket, 7-58 VDC
Power consumption	Idle: < 2 W, Max: < 9 W (no PoE device connected)
PoE standart	802.3af/at (max 30 W per port, total power budget 120W*)
Ethernet	5 x 10/100/1000 Ethernet ports: 4 x PoE, 1 x Uplink
Status LEDs	10 x Ethernet, 1 x Power
Ingress protection rating	IP30
Operating temperature	-40 °C to 75 °C
Housing	Aluminium housing with wall or DIN rail mounting option and grounding capability
Dimensions	115 x 32 x 95 mm
Weight	340 g

PERFORMANCE SPECIFICATIONS

Bandwidth	10 Gbps
Packet buffer	128 KB
MAC address table size	2K entries
Auto MDI/MDI-X Cable Detection	Yes

*Provided power supply only allows 60 W PoE power budget at PSE, to reach maximum 120 W at PSE >130 W power PSU must be used

TSW110

L2 UNMANAGED SWITCH

TSW110 is an unmanaged layer 2 switch. This tiny but rugged professional device enables industrial high bandwidth applications with a reliable data connection. It has five Gigabit Ethernet ports to connect equipment to the newtork and supports wide power supply voltages (9-30 V).

GIGABIT ETH
5 x Gigabit Ethernet with speeds up to 1000 Mbps

DURABILITY
Rugged aluminum housing

MOUNTING
DIN rail and surface mounting options

TEMPERATURE
Operating temperature -40 °C to 75 °C

STANDARD PACKAGE CONTAINS:
TSW110 // 9 W PSU // QSG (Quick Start Guide) // Packaging box

HARDWARE

Powering option	4pin power socket, 9-30 VDC
Power consumption	Idle: < 0.4 W, Max: < 1.8 W
Ethernet	5 x 10/100/1000 Ethernet ports
Status LEDs	10 x Ethernet, 1 x Power
Ingress protection rating	IP30
Operating temperature	-40 °C to 75 °C
Housing	Aluminium housing with wall or DIN rail mounting option and grounding capability
Dimensions	100 x 30 x 85 mm
Weight	227 g

PERFORMANCE SPECIFICATIONS

Bandwidth	10 Gbps
Packet buffer	128 KB
MAC address table size	2K entries
Auto MDI/MDI-X Cable Detection	Yes

REMOTELY MANAGED SURVEILLANCE SOLUTION FOR LOGISTICS CENTER

// SMART CITY

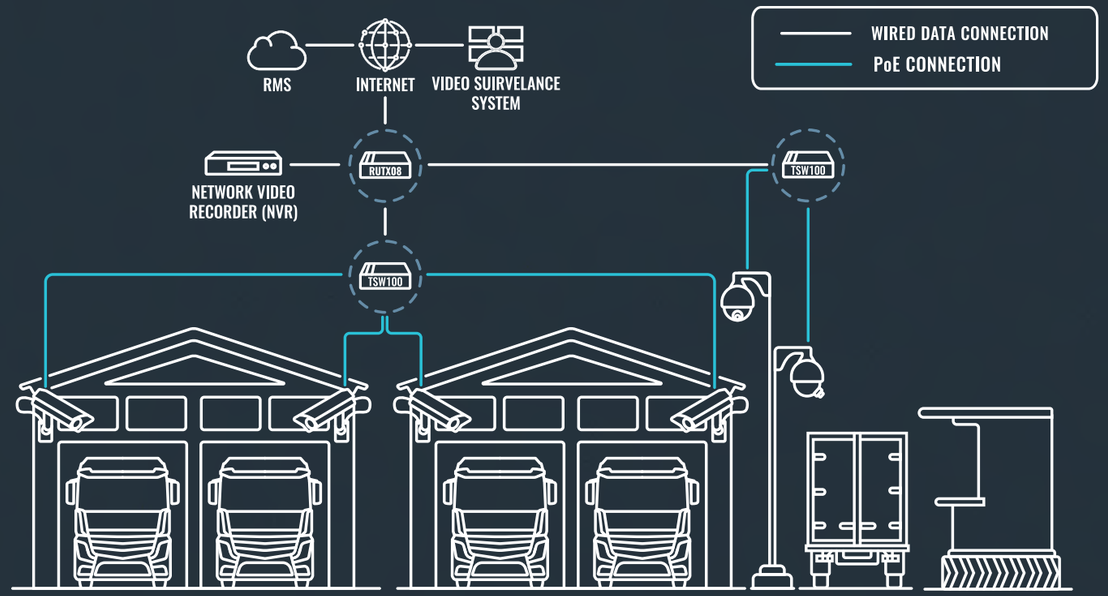
According to Statista, the overland freight movement market is worth 791.7 billion in the US alone. When the truck is parked, cargo safety remains crucial on the road. Naturally, such a task requires a high-tech solution.

SOLUTION
RUTX08 industrial Ethernet router acts as a central component in the whole setup. It links the TSW100 switches into a single network and connects an NVR, which stores all the video streams from the cameras. RUTX08 acts as the main gateway between the user, the internet, and the surveillance system.

Naturally, the cameras require internet and electricity to keep running, so the TSW100 industrial PoE+ switch was a perfect fit. TSW100 provides both through the same connection. Four PoE ports accommodate CCTV cameras that monitor the parking space availability and track activity in the parking lot at any time.

Besides, the TSW100 can manage a more advanced PTZ camera with up to 30 W per Ethernet port. Combined with RMS and RUTX08, you may enjoy an entirely remotely controlled solution with an option of accessing each of the PTZ cameras' WebUI and recording automatic movement tracking. It is even more convenient when multiple devices are located across different parking sites, as you may manage them all under one user-friendly interface.

BENEFITS
/Easy set up with a plug-and-play TSW100 switch without any additional configurations.
/RUTX08 features Gigabit Ethernet for uncompromised high-speed video data transfer.
/RUTX08 is compatible with the Teltonika Remote Management System for controlling multiple camera settings without traveling to the physical location.



VOIP CONNECTIVITY ACROSS BRANCHES AND HOME OFFICES

// ENTERPRISE

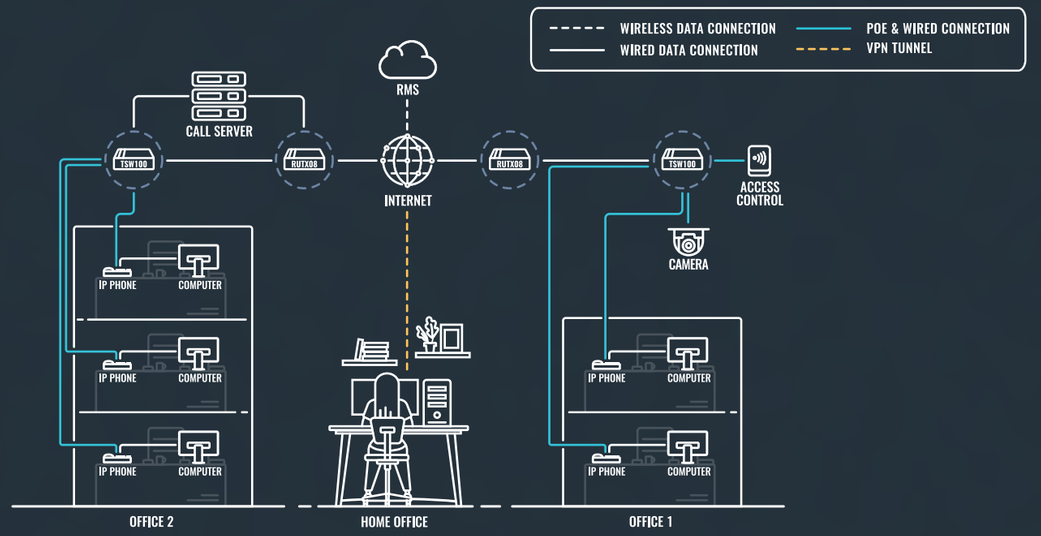
More than 30% of all businesses use VoIP systems. The Global VoIP market share is expected to reach $55 billion by 2025. Although the biggest spurt in growth was up to 2012, it remains growing steadily to this day, and not without a reason. It is a cost-efficient and convenient way for a business to set up communication with other VoIP or landline users via the internet. It is expected that small to mid-size businesses will find VoIP especially attractive in the coming years due to smaller costs of implementation and remote work trends.

SOLUTION
In this solution, remote offices and employees working from home can use the same Call Server, connected to the internet using a RUTX08 Gigabit Ethernet router. RUTX08 offers enough data throughput for a bandwidth-demanding VoIP system and ensures reliable internet connectivity.

In the headquarters, TSW100 is used to connect the multiple IP phones in the office to the internet and powers them up at the same time, making the setup process very simple and quick. TSW100 switch can power up other devices as well, like IP cameras and Access Control System, as you may notice in the Branch connectivity bit.

RUTX08 comes with built-in RutOS software, offering advanced security features, such as multiple supported VPN services, Firewall, making this device a superb performer for such solutions. Firewall and VPN encryption ensures that the communication is taking place securely, even when the employees are working from their homes. Remote Management System (RMS) allows to configure all routers remotely and even reach the devices behind them, like the IP phones, cameras via RMS Connect.

BENEFITS
/Gigabit Ethernet – RUTX08 offers enough bandwidth to ensure good call quality.
/Easy and economical setup – using TSW100 reduces the number of wires and the setup time.
/Security – provided by Firewall and VPN data encryption.
/Remote Management – with RMS Connect IT administrators can reach the routers and devices behind them for updates, maintenance and configuration.
/A single vendor to connect everything – TSW100 allows to connect the IP phones, cameras, Access Control, making the maintenance process easier.



RUT300

INDUSTRIAL ETHERNET ROUTER

Rugged industrial fast Ethernet router comes with the benefits of RutOS, advanced security features, and a possibility to connect to the RMS. Five fast Ethernet ports, two configurable digital inputs/outputs, and a USB 2.0 allow to easily connect industrial machinery, office or retail equipment, and other devices to the internet.

INTERFACES

5 x Fast Ethernet ports (10/100 Mbps). 2 x Configurable digital Inputs/Outputs and USB 2.0

DURABILITY

Rugged aluminum housing capable to withstand harsh environments

VPN

Numerous VPN services including OpenVPN, IPsec, PPTP, L2TP & DMVPN, L2TP, DMVPN,

RMS

For remote management, access & VPN services

STANDARD PACKAGE CONTAINS:

RUT300 // 9 W PSU // Ethernet cable (1.5 m) // RMS Flyer // QSG (Quick Start Guide) // Packaging box

HARDWARE

CPU	QCA9531, MIPS 24kc, 650 MHz
Memory	64 MB, DDR2
Storage	16 MB, SPI Flash
Powering option	4 pin power socket, 7-30 VDC
Ethernet	5 x 10/100 Ethernet ports: 1 x WAN, 4 x LAN
Inputs/Outputs	On 4 pin socket: 2 x Configurable digital Inputs/Outputs open collector output
Other	1 x USB Host
Status LEDs	5 x Ethernet, 1 x Power
Operating temperature	-40 °C to 75 °C
Housing	Aluminium housing with DIN rail mounting option and grounding capability
Dimensions (W x H x D)	100 x 30 x 85 mm
Weight	229 g

SOFTWARE

Operating system	RutOS (OpenWrt based Linux OS)
Network protocols	TCP, UDP, IPv4, IPv6, ICMP, NTP, DNS, HTTP, HTTPS, FTP, SMTP, SSLv3, TLS 1.3, ARP, PPP, PPPoE, DHCP, Telnet
Routing	Static routes, Routing rules, Dynamic routes (BGP, OSPFv2, RIPv1/v2, EIGRP, NHRP
Firewall	Port forward, Traffic rules, Custom rules, Pre-configured firewall rules, DMZ, NAT, NAT-T, NAT helpers, Unlimited firewall configuration via CLI
Security	DDOS prevention (SYN flood protection, SSH attack prevention, HTTP/HTTPS attack prevention), Port scan prevention (SYN-FIN, SYN-RST, X-mas, NULL flags, FIN scan attacks)
VPN and tunneling	OpenVPN, IPsec, GRE, PPTP, L2TP, Stunnel, DMVPN, SSTP, ZeroTier, WireGuard
Monitoring and Management	WEB UI, CLI, SSH, TR-069, SNMP, JSON-RPC, MQTT, MODBUS, RMS
Cloud solutions	RMS, FOTA, Azure IoT Hub, Cloud of Things, Cumulocity, ThingWorx
Services	DDNS, Wake On Lan (WOL), WEB filter, UPNP, Network shares (Samba), Traffic Logging
Administration	Multi user, Configuration profiles, Diagnostics, logs, Configuration backup

RUTX08

INDUSTRIAL ETHERNET ROUTER

This robust industrial router has four Gigabit Ethernet ports, a Quad-Core CPU, and 256 MB RAM. These powerful specifications combined with core RutOS software features, such as multiple VPN services, advanced Firewall, and RMS support, make this device a superb industrial performer.

GIGABIT ETH

4 x Gigabit Ethernet ports with up to 128 port/tag-based VLANs supported

VPN

Numerous VPN Protocols supported, including OpenVPN, IPsec, PPTP, L2TP & DMVPN

PROTOCOLS

Compatible with industrial DNP3 & Modbus communication protocols

RMS

For remote management, access & VPN services

STANDARD PACKAGE CONTAINS:

RUTX08 // 9 W PSU // Ethernet cable (1.5 m) // RMS Flyer // QSG (Quick Start Guide) // Packaging box

HARDWARE

CPU	Qualcomm, 4 x ARM Cortex A7, 717 MHz
Storage	256 MB Flash
Memory	256 MB RAM
Powering option	4pin power socket, 9-50 VDC
Ethernet	4 x 10/100/1000 Ethernet ports: 1 x WAN (configurable as LAN), 3 x LAN
Inputs/Outputs	On 4pin socket: 1 x Digital input, 1 x Digital open collector output
Other	1 x USB Host
Status LEDs	8 x Ethernet, 1 x Power
Operating temperature	-40 °C to 75 °C
Housing	Aluminium housing with DIN rail mounting option and grounding capability
Dimensions (W x H x D)	115 x 32.2 x 95.2 mm
Weight	345 g

SOFTWARE

Operating system	RutOS (OpenWrt based Linux OS)
Network protocols	TCP, UDP, IPv4, IPv6, ICMP, NTP, DNS, HTTP, HTTPS, FTP, SMTP, SSLv3, TLS 1.3, ARP, PPP, PPPoE, DHCP, Telnet
Routing	Static routes, Dynamic routes (BGP, OSPFv2, RIPv1/v2, EIGRP, NHRP), Routing rules
Firewall	Port forward, Traffic rules, Custom rules, Pre-configured firewall rules, DMZ, NAT, NAT-T, NAT helpers, Unlimited firewall configuration via CLI
Security	DDOS prevention (SYN flood protection, SSH attack prevention, HTTP/HTTPS attack prevention), Port scan prevention (SYN-FIN, SYN-RST, X-mas, NULL flags, FIN scan attacks)
VPN and tunneling	OpenVPN, IPsec, GRE, PPTP, L2TP, Stunnel, DMVPN, SSTP, WireGuard, ZeroTier
Monitoring and Management	WEB UI, CLI, SSH, TR-069, SNMP, JSON-RPC, MQTT, MODBUS, RMS
Cloud solutions	RMS, FOTA, Azure IoT Hub, Cloud of Things, Cumulocity, ThingWorx
Services	DDNS, VRRP, Wake On Lan (WOL), WEB filter, UPNP, Network shares (Samba), Traffic Logging
Administration	Multi user, Configuration profiles, Diagnostics, logs, Configuration backup

RUTX10

PROFESSIONAL ETHERNET ROUTER

This professional router combines the best of wired and wireless routing functionalities with Gigabit Ethernet, Bluetooth LE, and AC Wi-Fi. Advanced remote management capabilities along with numerous supported security and networking protocols make RUTX10 an ideal choice for professional applications.

GIGABIT ETH

4 x Gigabit Ethernet ports with up to 128 port/tag-based VLANs supported

WI-FI & BT

Wave-2 802.11ac Dual Band WIFI and Bluetooth LE

MULTIPLE VPNs

Numerous VPN Protocols supported, including OpenVPN, IPsec, PPTP, L2TP & DMVPN

RMS

For remote management, access & VPN services

STANDARD PACKAGE CONTAINS:

RUTX10 // 18 W PSU // 2 x WiFi antennas (swivel, RP-SMA male) // 1 x Bluetooth antenna (magnetic mount, RP-SMA male, 1.5 m cable) // Ethernet cable (1.5 m) // RMS Flyer // QSG (Quick Start Guide) // Packaging box

HARDWARE

CPU	Qualcomm, 4 x ARM Cortex A7, 717 MHz
Storage	256 MB Flash
Memory	256 MB RAM
Powering option	4pin power socket, 9-50 VDC
Antenna connectors	2 x RP-SMA for WiFi, 1 x RP-SMA for Bluetooth
Ethernet	4 x 10/100/1000 Ethernet ports: 1 x WAN (configurable as LAN), 3 x LAN
WiFi	IEEE 802.11b/g/n 2.4GHz, IEEE 802.11ac/n/a 5GHz, Access point (AP), Station (STA)
Bluetooth	4.0 (Low energy)
Inputs/Outputs	On 4pin socket: 1 x Digital input, 1 x Digital open collector output
Other	1 x USB host
Status LEDs	2 x WiFi, 8 x Etherner, 1 x Power
Operating temperature	-40 °C to 75 °C
Housing	Aluminium housing with DIN rail mounting option and grounding capability
Dimensions	115 x 32.2 x 95.2 mm
Weight	355 g

SOFTWARE

Operating system	RutOS (OpenWrt based Linux OS)
Network protocols	TCP, UDP, IPv4, IPv6, ICMP, NTP, DNS, HTTP, HTTPS, FTP, SMTP, SSLv3, TLS 1.3, ARP, PPP, PPPoE, DHCP, Telnet
Routing	Static routes, Dynamic routes (BGP, OSPFv2, RIPv1/v2, EIGRP, NHRP), Routing rules
VPN and tunneling	OpenVPN, IPsec, GRE, PPTP, L2TP, Stunnel, DMVPN, SSTP, WireGuard, ZeroTier
Monitoring and Management	WEB UI, CLI, SSH, TR-069, SNMP, JSON-RPC, MQTT, MODBUS, RMS
Connection monitoring	Ping Reboot, Wget reboot, Periodic Reboot, LCP and ICMP for link inspection
Cloud solutions	RMS, FOTA, Azure IoT Hub, Cloud of Things, Cumulocity, ThingWorx
Hotspot	External/Internal Radius, SMS OTP, MAC authentication, Walled Garden
Supported Hotspot platforms	IronWiFi, HotspotSystem, Cloud4Wi, SAI + WiFi, MugiCloud, Purple.ai
Services	DDNS, VRRP, Wake On Lan (WOL), WEB filter, UPNP, Network shares (Samba), Traffic Logging

MESH NETWORK ENABLING SMART FACTORY CONNECTIVITY

// INDUSTRIAL & AUTOMATION

Industry 4.0 and the increasing scale of automation are revolutionizing manufacturing. With every developed innovative technology, less and less human interaction is required in the day-to-day operation of factories. The benefits of automation are multiple: it helps eliminate human errors, increase productivity, reduce costs and acquire valuable data for future optimization. And that is why the global industrial automation market is growing at an exponential rate, expecting to have surpassed 200 billion US dollars next year.

SOLUTION

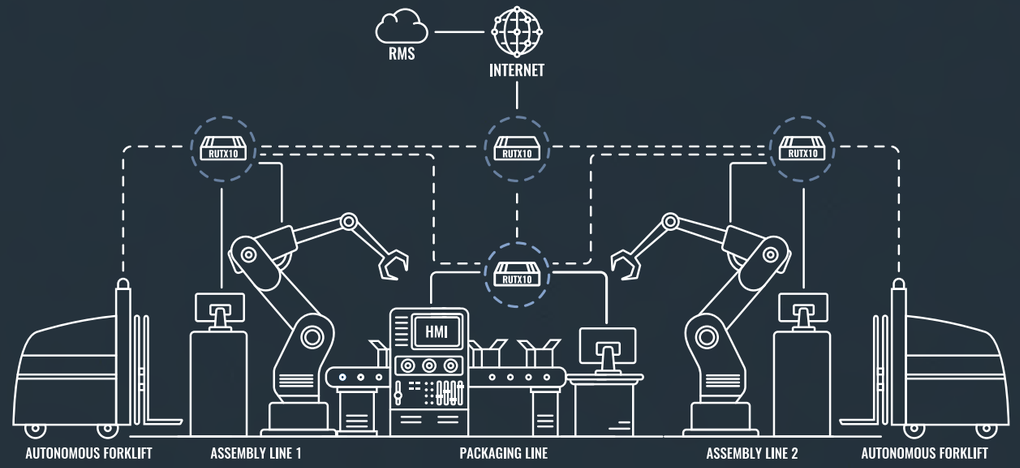
Factory connectivity solution requires professional rugged routers that can sustain the challenges of an industrial environment. Naturally, each device can only cover only a limited area with desirable signal strength. For this reason, multiple RUTX10 Ethernet routers were installed to enable a strong-enough Wi-Fi and ensure seamless operation of all the computers and machinery. While setting up one router does not take a lot of IT resources, configuring multiple to create a secure network can become a time and energy-consuming project. In such cases - creating a Wi-Fi Mesh network could be your best bet.

The 802.11s standard available in RutOS allows connecting various wireless equipment without setting up complicated infrastructure. Mesh Wi-Fi enables quick and easy configuration. All you need to do is configure one router and apply the same properties to the rest of the network via a user-friendly WebUI. Besides, if one node in the network fails or disconnects, the Mesh network will self-heal and continue the route onto the next node until the issue is resolved. This way, the network continuity remains uninterrupted, and the processes may continue as they were.

Since the factory topology includes moving objects (like autonomous forklifts), this adds another challenge: they need a fast transition between one router and another. That is where 802.11r support (aka Fast Roaming) comes into the picture to save the day. With Fast Roaming, autonomous moving machines can travel around production facilities and seamlessly communicate, quickly switching among routers of the same network.

BENEFITS

/Equipped with Dual Band Wi-Fi 5 802.11ac, RUTX10 offers high data transmission and robust wireless performance.
/Multiple supported protocols, including MQTT, Modbus, Bluetooth, DNP3, make this router suitable for industrial automation solutions.
/The solution is easily scalable due to the simplicity of the Wi-Fi Mesh network configuration.
/Advanced security features, like multiple VPN choices, Firewall, access control, and others, ensure the system runs uncompromised.
/The solution can be remotely monitored and managed with Teltonika Networks Remote Management System (RMS).
/Industrial aluminum casing of the router ensures that it sustains challenging environments and offers convenient mounting options.



SECURE CONNECTIVITY FOR BANK BRANCHES

// ENTERPRISE

Today's banking would be unimaginable without the internet and technology. Not a single service could be provided without having access to the internet, connecting various systems and databases of a bank. The financial sector is among the most rapidly changing verticals nowadays. While in some places of the world the growth of mobile and internet banking is making a portion of physical banks obsolete, in other places the number of branch additions is still on the rise, or elsewhere they are getting reshaped to meet the changing market needs and methods of providing services.

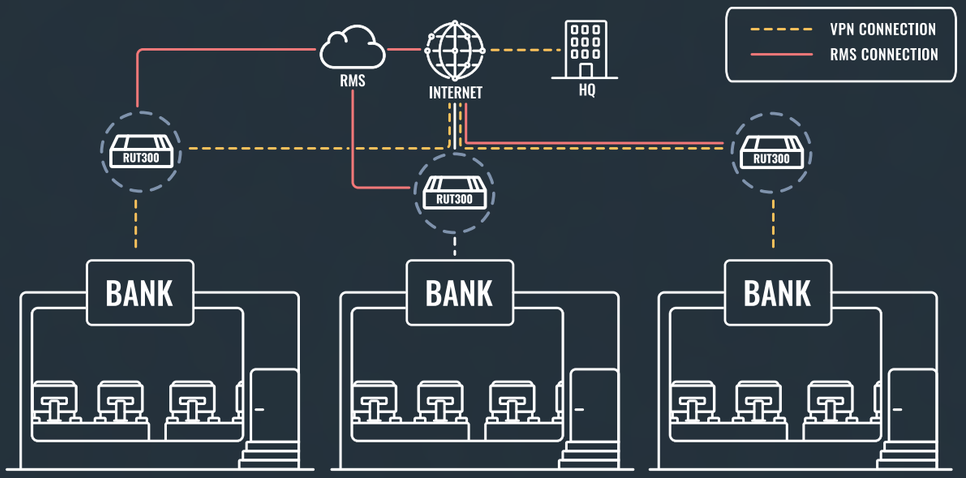
SOLUTION

The bank branches in the US and across the world are getting smaller in size and the staff. The number of full-time employees has declined and varies on average from 3 to 8 per branch. As seen in topology, such branches do not require a complicated network infrastructure and Ethernet connectivity fully suffices the day-to-day operations.

RUT300 Ethernet router has five fast Ethernet ports to easily plug in the computers and gives immediate access to the internet. It is a small device that will easily fit into any cabinet or on a desk and the Passive PoE feature makes it very simple to deploy avoiding additional wires and messy setups. A USB port can be used to easily connect a printer or other office equipment to the network.
This device enjoys an abundance of RutOS benefits. It comes with a preconfigured Firewall, meaning that it is immediately safe to use. It also offers a selection of 10 different VPN services to establish a secure and private connection between the branches and the headquarters. RUT300 is compatible with Remote Management System (RMS), so the routers can be easily configured, updated, and troubleshot from a distanced location. Additionally, RMS Connect allows you to reach the equipment connected to the routers and manage it remotely as well (e.g., computers, printers, IP phones, etc.).

BENEFITS

/Simple setting-up process – such solution takes minutes to connect and can be easily transferred to a new setting.
/Security – pre-configured Firewall makes the device safe to use from the very first seconds without complicated configurations.
/Multiple VPNs – 10 various VPN services to choose from to establish a private connection between the remote branches and the headquarters.
/Small sized device – will fit into any server cabinet, drawer, or simply anywhere when using a DIN rail mounting option.
/Remote management of the whole solution – via RMS Connect.



CELLULAR DEVICES COMPARISON

Products key features	MODEMS		GATEWAYS						ROUTERS		
	TRM240	TRM250	TRB140	TRB141	TRB142	TRB145	TRB245	TRB255	RUT200	RUT240	RUT241
4G/LTE category	Cat1	M1/NB	Cat4	Cat1	Cat1	Cat1	Cat4	M1/NB	Cat4	Cat4	Cat4
3G	•		•	•	•	•	•		•	•	•
2G	•	•	•	•	•	•	•	•	•	•	•
CPU (MHz)			1200	1200	1200	1200	650	650	580	400	580
RAM (MB)			128	128	128	128	64	64	128	64	128
Flash memory (MB)			512	512	512	512	16	16	16	16	16
Passive PoE			•						•	•	•
Power voltage (VDC)	5	5	9-30	9-30	9-30	9-30	9-30	9-30	9-30	9-30	9-30
SIM card slots	1	1	1	1	1	1	2	2	1	1	1
Ethernet ports			1				1	1	2	2	2
Ethernet speed (Mbps)			1000				100	100	100	100	100
WiFi standard									n	n	n
GNSS							•	•			
Inputs/Outputs			2	8	2	2	4	4	2	2	2
RS232					•		•	•			
RS485						•	•	•			
Bluetooth											
USB	Slave	Slave	Slave	Slave	Slave	Slave					
DIN Rail mounting	•	•	•	•	•	•	•	•	•	•	•
Rack mounting											
Flat surface mounting	•	•	•	•	•	•	•	•	•	•	•
Grounding terminal											
Sleep mode	•	•									
RMS support			•	•	•	•	•	•	•	•	•
RutOS			•	•	•	•	•	•	•	•	•

Products key features	ROUTERS										
	RUT360	RUT950	RUT951	RUT955	RUT956	RUTX09	RUTX11	RUTX12	RUTX14	RUTXR1	TCR100
4G/LTE category	Cat6	Cat4	Cat4	Cat4	Cat4	Cat6	Cat6	2xCat6	Cat12	Cat6	Cat6
3G	•	•	•	•	•	•	•	•	•	•	•
2G		•	•	•	•						
CPU (MHz)	650	550	580	550	580	4x717	4x717	4x717	4x717	4x717	650
RAM (MB)	128	128	128	128	128	256	256	256	256	256	128
Flash memory (MB)	16	16	16	16	16	256	256	256	256	256	16
Passive PoE		•	•	•	•	•	•	•	•		
Power voltage (VDC)	9-30	9-30	9-30	9-30	9-30	9-50	9-50	9-50	9-50	2x(9-50)	9-30
SIM card slots	1	2	2	2	2	2	2	2	2	2	1
Ethernet ports	2	4	4	4	4	4	4	5	5	5	2
Ethernet speed (Mbps)	100	100	100	100	100	1000	1000	1000	1000	1000	100
WiFi standard	n	n	n	n			ac	ac	ac	ac	ac
GNSS				•			•	•	•		
Inputs/Outputs	2	2	2	6	8	2	2	2	2		
RS232				•	•						
RS485				•	•						
Bluetooth							•	•	•		
USB				Host	Host	Host	Host	Host	Host	Host	
DIN Rail mounting	•	•	•	•	•	•	•	•	•		
Rack mounting										•	
Flat surface mounting	•	•	•	•	•	•	•	•	•		•
Grounding terminal						•	•	•	•	•	
Sleep mode											
RMS support	•	•	•	•	•	•	•	•	•	•	•
RutOS	•	•	•	•	•	•	•	•	•	•	•

ETHERNET & WIRELESS DEVICES COMPARISON

Products key features	SWITCHES		ROUTERS		
	TSW100	TSW110	RUT300	RUTX08	RUTX10
CPU (MHz)			650	4x717	4x717
RAM (MB)			64	256	256
Flash memory (MB)			16	256	256
Passive PoE		•	•	•	•
PoE out	802.3af/at				
Power voltage (VDC)	7-57	9-30	7-30	9-50	9-50
Ethernet ports	5	5	5	4	4
Ethernet speed (Mbps)	1000	1000	100	1000	1000
WiFi standard					ac
Inputs/Outputs			2	2	2
Bluetooth					•
USB			Host	Host	Host
DIN Rail mounting	•	•	•	•	•
Flat surface mounting	•	•	•	•	•
Grounding terminal	•	•		•	•
RMS support			•	•	•
RutOS			•	•	•

ACCESSORIES / POWERING OPTIONS

Power supply, 9 W
EU: PR3PUEU3 // UK: PR3PUUK3
AU: PR3PUAU3 // US: PR3PUUS3

2-pin power supply, 9 W
EU: PR3PREU6 // UK: PR3PRUK6
AU: PR3PRAU6 // US: PR3PRUS6

Power supply, 18 W
EU: PR3PXEU3 // UK: PR3PXUK3
AU: PR3PXAU3 // US: PR3PXUS3

Power supply, 24 W
EU: PR3P2EU3 // UK: PR3P2UK3
AU: PR3P2AU3 // US: PR3P2US3

Power supply, 50 V, 1.3 A
EU: PR3PWEU3 // UK: PR3PWUK3
AU: PR3PWAU3 // US: PR3PWUS3

Universal power supply, 9 W
Order code: PR3PUPS3

4-pin to barrel socket adapter
Order code: PR2PD01B

4-pin power adapter with I/O access
Order code: PR5MEC21

Automotive power supply
Order code: PR2AM20M

Power cabel whit 4-way screw terminal
Order code: PR2FK20M

Power cabel whit 4-way open wire
Order code: PR2PL15B

4-pin plug with contact terminals
Order code: PR4MK04K

DIN Rail power supply
Order code: PR3PDNP0

ACCESSORIES / ANTENNA OPTIONS

COMBO MIMO mobile/GNSS/ WiFi ROOF SMA antenna
Order code: PR1KCO28

COMBO QUAD mobile/GNSS ROOF SMA antenna
Order code: PR1KCL28

COMBO SISO mobile/GNSS/ WiFi ROOF SMA antenna
Order code: PR1KCS28

COMBO MIMO mobile ROOF SMA antenna
Order code: PR1KCL25

Mobile magnetic SMA antenna
Order code: PR1KS210

Mobile SMA antenna
Order code: PR1US440

WiFi magnetic SMA antenna
Order code: PR1KRF30

WiFi SMA antenna
Order code: PR1URF51

Bluetooth magnetic SMA antenna
Order code: PR1KRT25

GNSS Adhesive SMA antenna
Order code: PR1KSG30

Mobile adhesive sma antenna
Order code: PR1AS420

WiFi dual-band SMA antenna
Order code: PR14RD35

WiFi dual-band magnetic antenna
Order code: PR1KRD30

Angled Compact Mobile antenna
Order code: PR1US450

Straight Compact Mobile antenna
Order code: PR1CS450

ACCESSORIES / MOUNTING OPTIONS

Compact DIN Rail Kit
Order code: PRMEC11

DIN Rail Kit
Order code: PR5MEC00

Surface mounting Kit
Order code: PR5MEC12

Surface clip holder Kit
Order code: PR5MEC22

OUR WORLDWIDE PRESENCE

CONTACT US

info@teltonika.lt

Crowd-support forum
https://community.teltonika.lt/

Wiki knowledge base
https://wiki.teltonika.lt/

Teltonika-networks
https://teltonika-networks.com/