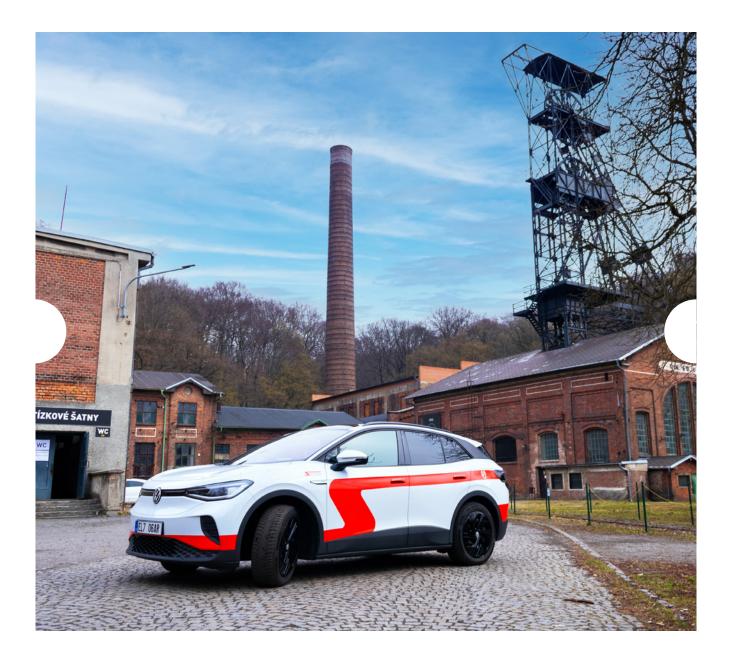


Connecting devices to bring the future now.





# HELLO!

Dear customers, business partners, colleagues and friends, It seems like only yesterday we said goodbye to 2021, so let's take another brief look at it. It's always good to summarize the previous year and look ahead to the future.

2021 was certainly one of the most difficult years in modern history. The slowdown in the economy, global logistics problems, the collapse of the automotive sector and the enormous rise in the prices of electricity, gas and other key commodities have dramatically changed the world around us. And another coronavirus epidemic hit us again. Every company was affected and not all coped with such an onslaught of problems.

I am very pleased that SECTRON handled this period with grace, and thanks to a tough team of employees, to new products and betting on the right cards, 2021 turned out to be better for us than expected. In fact, it was another evolutionary leap for the company.

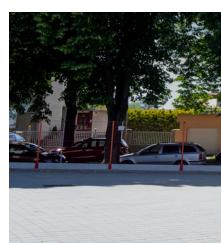
We were able to orient ourselves in the field of electromobility, introduce new products here, and we have expanded our range in wireless technologies to include 5G products (modules, routers and terminals). We have expanded our offer with a new



certified cable for wheeled vehicles and our range of antennas has new products as well. We have also completed the modernization of our company fleet, which has been largely electrified. Increased demand has meant an increase in our production of cable reducers and antennas, increasing the volume of our goods sold.

Our most significant challenge for the future will be to manage the pressure on input prices, to focus on rising costs in logistics and energy, optimize processes within the company, and expand our portfolio of products and services. Success is not a coincidence, rather hard work, and thanks to it the positives of the past period here at SECTRON have overcome an unfavorable and difficult situation. This success is thanks to all of you, employees, business partners and suppliers.

Marek ZAMARSKI SECTRON CEO



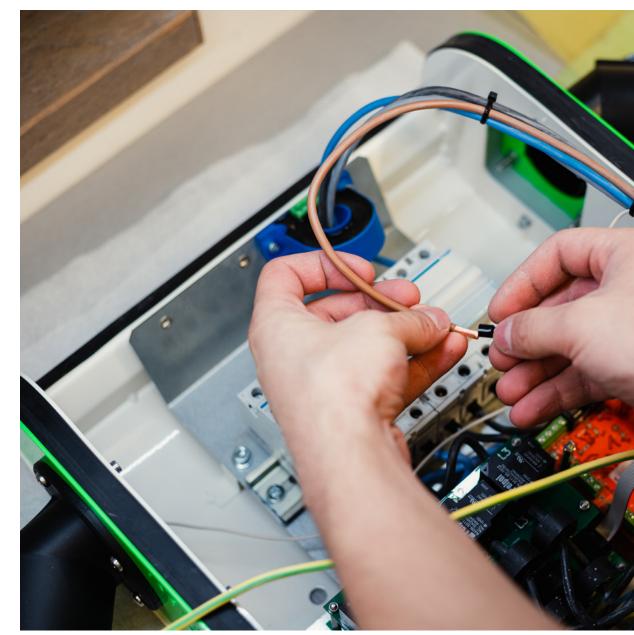
# CONTENTS

	A WORD FROM THE CEO	01
	NEWS IN BRIEF	03
	SMART CHARGER	09
	CZECH WALLBOXES	11
	WIRELESS MODULES	13
	NEW INDUSTRIAL ROUTERS	15
	WE ARE A PLATINUM PARTNER	17



## SUBSIDIES FOR WALLBOXES IN CZ

A new subsidy went into effect in the Czech Republic in November 2021: New Green Savings, E-mobility. This subsidy provides support for the acquisition and installation of a charging station for electric vehicles and other equipment necessary for operations. The subsidy applies to both family homes and apartment buildings. It can be obtained by any owner of an existing housing unit or new building, but also by a community of unit owners. The amount of the subsidy is CZK 30,000 per charging point. You can find more information about it at https://2030.novazelenausporam.cz.



# SHORT NEW



S

## SECTRON IOT CAMP

iaisons with vocational high schools and universities have been rooted in SECTRON for several years and we are very pleased that individuals are still willing to learn new things, passionate about their cause, eager
to expand their knowledge and skills, and come up with new ideas.

An ancient Chinese proverb says: "Learning in youth is engraving on stone, learning in old age writing on sand."

We are very happy that in 2022 we can organize a SECTRON IoT camp for selected students from the Secondary School of Electrical Engineering and Informatics in Ostrava. As the name suggests, the school has two fields of study: Informatics (computer science) and Electrical Engineering. This school is attended by about 550 pupils. Computer scientists focus on programming and networking. Electrical engineers in power engineering and informatics in industry 4.0. This year, students will be involved in exciting projects in our camp and will be able to try out the theoretical knowledge they gain from their school subjects.

# **THE ENVIRONMENT** FIRST AND FOREMOST

he people at SECTRON value the nature around us, so the team of the product department organized a collection of old paper during the pre-Christmas cleanup at the office. It's unbelievable, but we managed to collect over 88 kg of old and used paper from cabinets, drawers and baskets, which we used to support a chosen kindergarten in the district competition for collecting old paper. We are very happy for this liaison and pleased that the children will receive new toys and work aids for the money earned.

## **CARS** OF THE FUTURE

n the autumn of last year, I had the opportunity to meet an amazing person who is intensely dedicated to handicapped children and does it wholeheartedly. Our talk included electromobility, and this is where the idea of cooperation between us arose: let's organize a competition: an entire school painting on the theme of Car of the Future through the eyes of handicapped children. We would like to thank teacher Tereza Velká, who helped us organize the whole event and sent us the works of art of her charges. All the pictures reflected the imagination of children, so we rewarded all the kids with a package of sweets, diploma and a small toy. How do you like them?



#### NEW IN THE SECTRON OFFER



New in our offer is the certified SC-174 cable, which meets the EN 45545-2 standard for wheeled vehicles and allows us to expand our line of special antennas for this specific group of customers. Our expansion also includes custom producing of coaxial cables according to customer requirements for the length and type of connector for wheeled vehicles.

In connection with this coaxial cable, we will expand our production of antennas. The first wave will introduce the market to alternatives for these antennas: AO-AUMTS-S2B-SC174, AO-AKOM-30BS-SC174, AP-AGNSS-SMA-SC174.

We always listen to customers requests and are ready to prepare a custom antenna according to their specifications.

#### WHAT IS EN45545-2?

EN 45545-2:2020 is a standard that specifies the requirements for reaction to fire in the properties of materials and products used on rolling stock, as defined in EN 45545-1. The obligation to apply fire safety requirements to rolling stock follows from the provisions of Article 42. 10. 2 of EU Commission Regulation No. 1302 / 2014EU – LOC & PAS TSI.

This regulation explicitly imposes an obligation to use material in the design of rolling stock that meets the requirements of the EN 45545 series of standards, thus also meeting the conditions for wheeled vehicles.

This EU Commission regulation is binding on all EU member states at the level of a legal requirement. It is not possible to certify and put a new vehicle into service without demonstrable compliance with LOC & PAS TSI regulations.



E OFFER YOU CO-OPERATION IN THE DEVELOPMENT AND IMPLEMENTATION OF WIRELESS TECHNOLOGIES IN WHEELED VEHICLES IN COMPLIANCE WITH ALL NECESSARY STANDARDS.



#### **OUR FLEET**

We have expanded our fleet with additional electric cars. The choice was not easy, but in the end we opted for VW ID.4 cars with a larger battery capacity to ensure greater driving distances. We currently use VW ID.3, ID.4, Kia eNiro and Audi e-tron cars. We are also considering going fully electric, because our first experience, the economy of car operation and service costs of operation, all speak in favor of electromobility. The driving range of the new electric cars enable them to get more than just around the city. If you use them for longer trips, the return on investment increases significantly.



#### WE ARE PARTNERS OF ADMD

SECTRON has become a partner of the Association of Prefabricated Home Builders for electromobility issues. Our mission is to acquaint partners and their clients with electromobility, to provide technical support in the construction of houses and to ensure the supply, installation and inspection of charging stations (wallboxes). The independent Association of Prefabricated Home Builders brings together companies convinced that wooden buildings are the right way forward in modern and sustainable construction.

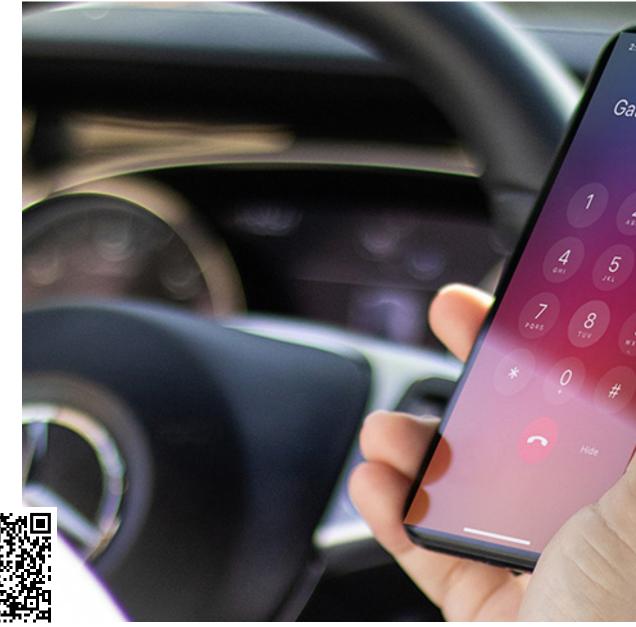


#### EXHIBITIONS HAVE STARTED UP AGAIN

It's been a long time. After three years, exhibitions and meetings with customers have started up again. TEK.DAY in Wroclaw, Poland, is already behind us. We are intensively preparing for AMPER 2022, the largest Czech trade fair that was last held in 2019 in Brno. Another interesting event will be EVERTIQ, which will take place in the autumn in Warsaw. And besides them, we have some smaller conferences at home. We look forward to meeting you.

# **GSM KEY**

GSM Key has been in the SECTRON product portfolio since 2005. This product was created at that time as a demo of the basic functions of controlling a device wirelessly using the GSM band, i.e. mobile phone. There was such interest in it that the first working version of the GSM Key was created and others followed. We are currently offering the third generation of GSM Keys, which is called GSM KEY because it is also popular abroad.





The original key control using SMS commands was extended by a program in Windows and applications for mobile phones with Android or iOS. In 2020, we introduced the platform GSM KEY CLOUD, which expands the possibilities of GSM KEY control to the most convenient user management and hardware settings. This service is constantly evolving, both from the user's point of view and in the new features of the device.

A novelty for 2022 is the extension of the GSM KEY LITE 3, SMART 3 and PROFI 3 models with a completely new product. This time a very simple and affordable WiFi Key, which is designed mainly for homes and garages.

WiFi Key is a product that uses a mobile application for android or iOS control of gates, doors, barriers or any other device that is controlled by a relay. Just connect WiFi Key to a local WiFi network and pair your phone with the device. Up to 10 other users can be paired with the device, allowing them to control the connected drive motor at the output.

The operation of the device is free, because the user's local WiFi network is used for it. The device can be controlled from anywhere, including outside the local WiFi network. It requires you to have a data package activated on your mobile phone or to be connected to any WiFi network.

The WiFi Key is now undergoing test operation. Sales of the device are planned to start in 3Q/2022. The price of the equipment will be very reasonable. We do not expect the price to exceed two thousand crowns.







# THE WALLBOX ALTERNATIVE IS

harging an electric car is a topic as hot as electromobility itself. Especially for people who don't sit in an electric car at all but who read a lot of fake news and make their own conclusions from this information. Living with an electric car changes the habits of travel, but it's certainly nothing insurmountable. On the contrary, more frequent stops makes travel more comfortable, safer and healthier for drivers and crews.

# SMART CHAR



n electric car can be charged from any electrical outlet. However, the condition is to have the right cable. The standard charging cable is not a completely happy solution and we personally recommend pulling it out of the vehicle and purchasing a charging cable with a smart charger and the necessary cable reducers for different types of sockets. This will expand your charging options to the maximum. Charging an electric car from a conventional socket is a lengthy process, because it is charged with an output of about 2.4 kW / hour. So it means ten hours of charging (depending on the size of the battery in your vehicle). Charging from a three-phase socket is significantly faster and using the SECTRON charger also offers many additional features that make life with an electric car more pleasant.



ou can buy the portable where they use bag, with а practical English manual an and a wall bracket. The cable length is less than 6 meters.

We offer two types of chargers. One has an output of 11 kW (16 A) and the other 22 kW (32 A). The more powerful charger can be connected to a 32 A socket (CEE 5p 32 A/400 V) and it is used by users of an electric car that can charge at 22 kW. It is also used by users of Plug-in hybrids,

a higher SECTRON AC charger in charging power (up to 7.3 kW) for single-phase charging. However, for most electric vehicles, an 11 kW smart charger with a plug (CEE 5p 16 A/400 V) is fully sufficient. The great advantage of the 11 kW charger is its weight and the easier handling of the cable before and after charging. The charger can be used both on the road and as a home charger replacing the so-called wallbox. The SECTRON AC charger has many features: display for

operation, easier settina of maximum charging power, charger temperature, charging time and current power supplied to the battery during charging, delayed start of charging, electricity meter, charging memory, IP65 rain protection.

All these features and an attractive price make chargers these among the elite in the market.

#### YOU CAN BUY CHARGERS AT ESHOP.SECTRON.EU STARTING AT €421 W/O VAT.

#### SECTRON IS PARTNERING WITH OLIFE ENERGY A CZECH MANUFACTURER OF AC AND DC WALLBOXES !

IfeEnergy is a Czech company focused on the efficient production, distribution and consumption of energy. Through innovative solutions, it seeks to improve the world around us and thus contribute to a sustainable future.

Their battery power stations deserve recognition for maximizing the efficiency of solar power plants, reducing electricity distribution fees and enabling the operation of island photovoltaic power plant systems. A logical step in expanding the portfolio of this brand was to develop charging stations for electric vehicles.

Their charging stations are characterized by highquality workmanship, superior reliability and a unique design that follows current trends. Development and production is done in the Czech Republic, which was also one of the key factors in starting the partnership with SECTRON.

DEVELOPMENT AND PRODUCTION TAKE PLACE IN CZECHIA, WHICH WAS ALSO ONE OF THE FACTORS OF COOPERATION

11





YOU CAN VIEW THE OLIFE ENERGY PORTFOLIO OF WALLBOXES AND CHARGING STATIONS AT ESHOP. SECTRON.CZ IN THE ELECTROMOBILITY SECTION



ur offer of charging stations includes all types from slow and medium-fast AC chargers (stands or wallboxes) with a power input from 3.7 kW to 2x22 kW (double boxes) to fast and super fast DC charging stations with a power of 20-320 kW.

Want to know more about electromobility? Don't hesitate to contact our trained colleague.

BOGDAN SCHNEIDER +420 556 621 022 Bogdan.schneider@sectron.cz



#### LTE CAT.1BIS MAY BE AN OPPORTUNITY



A novelty on the market is the ELS62 wireless module of the LTE Cat.1bis series, which differs from the classic LTE concept in that, that it uses only one antenna for connection instead of two MAIN and AUX antennas. The module is part of the "smart family" product concept and is produced in EMEA (Europe, Middle East, Africa) and global versions. In the event of a network failure or absence, LTE allows backup connections to 2G networks.

Cinterion ELS62 provides transmission speeds DL: max. 10 Mbit/s, and UL: max. 5 Mbit/s, which makes it ideal for a large number of IoT applications such as security solutions (e.g. home alarms, smart meters), electronic measurements or applications requiring an efficient and continuous connection with easy integration.

Utilizing Cinterion's industrial design, ELS62 offers hardware compatibility and AT command compatibility with other Cinterion IoT modules from 2G to LTE, with the ability to use VoLTE and CSFB voice services. The product footprint is therefore interchangeable with some modules of the same size.

Outstanding security features of the ELS62 include Secure Boot, secure TLS 1.3/DTLS 1.2 communication, firmware encryption and more. In addition, cyber security advice is available from Thales Support. The Cinterion Module Division combines decades of industrial cellular module design and unrivaled expertise with eSIM technology to enhance security, device authentication, data encryption, and secure cellular network management.

#### **Use in practice:**

- Automotive industry, e.g. eCall services (automated emergency call to 112 from a car in the event of an accident)
- Metering (measuring various variables of weather, energy, agriculture, water management and more).
- Electromobility (monitoring and working with data from electric vehicle charging)
- Smart City (transferring data from camera and security systems)
- · Home alarm systems
- · Connections to medical devices and other smart measurements



#### HE ELS62 LTE CAT.1BIS IS IDEAL FOR SECURITY-RELATED APPLICATIONS REQUIRING AN EFFICIENT AND UNINTERRUPTED CONNECTION.



#### THALES 5G MODEM CARD MV31

he MV31 is a new wireless IoT modem card with 5G network support that provides high-performance mobile broadband Internet for IoT applications such as industrial routers, gateways, computers or tablets in Stand Alone (SA) and None Stand Alone (NSA) modes.

This modem card won the "Best Solution in Its Category" at the 2020 IoT 5G Leadership Awards. The award recognized its high download/uplink speed (up to 6 Gbit/s vs. 2 Gbit/s) with a backup transition to LTE Cat.20/Cat.13 and 3G networks.

MV31 is one of the most compact and durable devices, designed for industrial environments with its long life and continuous operation. It measures 42 mm  $\times$  30 mm  $\times$  2.5 mm with this design supporting Dual SIM and an advanced combination of positioning technology with GNSS dual-frequency. The GPS unit consists of receivers for GPS, Glonass, Beidou and Galileo. The module installed in the card supports the connection of 4x4 MIMO antennas shared with GNSS reception for operation up to 6 GHz and at the same time it provides an interface for 3×2v1 antenna connectors for mmWave operation.

#### Modem card features:

- $\cdot$  5G Standalone (SA) and Non-Standalone (NSA) support
- Integrated dual-frequency GNSS: simultaneous L1 and L5 support for GPS, GLONASS, Galileo and Beidou
- $\cdot$  Dual SIM with integrated eSIM support
- $\cdot$  Supply voltage range: 3.14 V 4.8 V
- Operating temperature: -40°C to +85°C
- $\cdot$  Dimensions 42 × 30 × 2.5 mm



#### THALES COMPANY

hales offers a broad portfolio of solutions, services and platforms for M2M and IoT applications, enabling businesses and people to trust our interconnected world. Thales offers the technology that customers need to simplify and accelerate development and ensure the security, reliability and longevity of M2M and IoT solutions.

Thales Cinterion modules are available for implementation in the end device as a component or stand-alone terminal, or in the form of a PCi card.

## THALES

# Two new additions to the portfolio of Robustel industrial IoT routers

) obustel has introduced two new devices in its portfolio of affordable industrial routers.

The first of these is the successor to the very popular R2000 model. The new model, marked R2010, takes into account customer requirements for interface and connectivity, and expands the interface options with RS232/RS485 ports. Thus, a simple, affordable and competitive network element is coming to the market for IoT and industrial environments for a wide range of customers. It is ideal for use in water management, gas and electricity supplies, and automated factories and warehousing.

uring development, great emphasis was placed on optimizing the device, increasing computing power, improving flash memory, and significantly strengthening WiFi coverage. Combined with Robustel RCMS, Smart Roaming, Dataguard and Edge2Cloud software solutions, the device is a versatile industrial router for massive field deployments.

The second novelty is the Robusel R2011 industrial cellular router model, which is equipped with five Ethernet ports and thus meets the requirements of customers who in the past relied on significantly more expensive products. With this model, Robustel purposefully fills a market gap with a cost-effective multiport industrial network router not only for IoT. It is a high quality and durable device designed for integration into industrial projects, retail networks, security and safety, healthcare, smart city. It is suitable for clients looking for a stable device at an affordable price, spiced up with an RJ45 interface.



#### List of Robustel R2010 and R2011 features:

- $\cdot$  Dual-SIM redundancy for an uninterrupted mobile connection
- $\cdot$  Optional Power over Ethernet (PoE) Powered Device (PD) feature
- RobustOS Link-Manager support for Cellular & Ethernet WAN, WLAN, connection backup and ICMP detection
- $\cdot$  Compatibility with RobustOS and optional applications

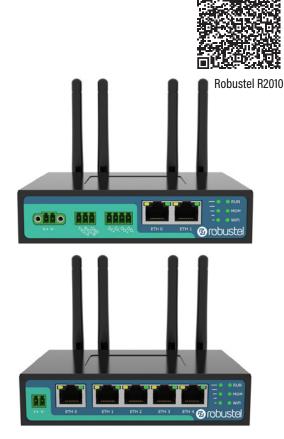
#### **Remote administration and maintenance via RCMS**

- $\cdot$  Watchdog for automatic and timed device restarts
- Industrial metal housing for elevated temperature, vibration and electromagnetic compatibility (EMC)



R obustel is one of the world's leading manufacturers of solutions for the IoT and M2M markets in industrial packaging. Robustel's portfolio of solutions includes wireless modems, routers, gateways, EDGE Computing, Cloud Software, modem and router applications and End-to-End IoT solutions.

Today's Robustel solutions can be found on literally every corner. They provide IoT solutions for industries as diverse as security, commerce, utilities, energy, transportation, healthcare or manufacturing and automation.

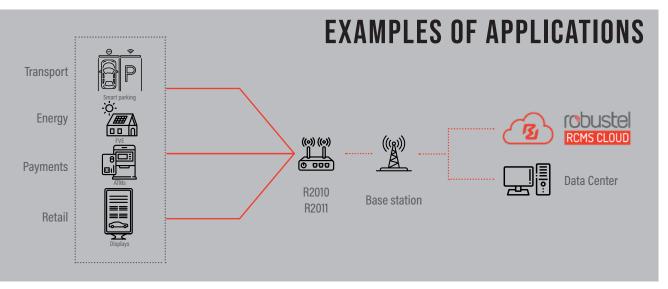


Robustel R2011



SECTRON is a long-term authorized partner of the Robustel brand for Central Europe.

For more information do not hesitate to contact our M2M and IoT specialist Pavla Nováčková (sales@sectron.cz).



### WHAT ARE Teltonika networks?

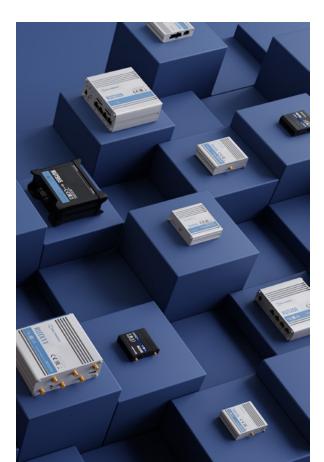
he Teltonika brand is a relatively young brand on the Czech market. But their dynamic development of new routers and terminals has catapulted the products of Teltonika Networks to among the best-selling devices in our country.

It is a very ambitious technology company from Lithuania which produces professional network equipment on an international level. With years of experience, in-house research and development of industrial network equipment for IoT and M2M communication, the company has developed a broad product portfolio for the most complex areas of Industry 4.0, Smart City and Green Energy. Outstanding support allows Teltonika to respond to market demands very quickly.

heir assortment includes modems, M2M industrial gateways, Ethernet and wireless routers. The accessories category offers power supplies, LTE omnidirectional antennas, DIN rail mounting kits, Bluetooth sensors and new backup batteries for routers. Their products include software for operating the M2M and IoT devices of Teltonika RMS.







#### WHERE CAN WE FIND THE PRODUCTS OF TELTONIKA NETWORKS?

- · WiFi hotspots for solar panels in less accessible parts of the planet
- · Home and business network security
- · Ensuring connectivity in IoT projects and EV charging stations
- Monitoring systems (traffic signals, logistics, construction, water management, beaches)
- Providing WiFi services in the hotel and restaurant industry
- · Facial recognition access terminals and biometric systems
- Providing connectivity for data collection and voice services for elevators
- · LTE connectivity at dispensing boxes





#### SECTRON HAS BECOME A TELTONIKA NETWORKS PLATINUM PARTNER 2022

SECTRON has confirmed its expertise and knowledge in the field of wireless technology, as well as its good sales results of Teltonika products. We thus received the PLATINUM partner title from Teltonika Networks for 2022. It is a great honor and commitment for us to maintain the high level of professionalism of the services and support we extend to our customers in their selection of a suitable solution, followed by the implementation and support of the project.



The latest additions to the Teltonika RUT2\*\* and RUT9\*\* routers: RUT241, RUT951 and RUT956 are on the market. You will notice that the new models look familiar. They are actually made from the same case as the previous products in this series; however, there are some fundamental differences inside.

Due to the shortage of chips on world markets and the significant extension of delivery times to weeks or even months, Teltonika has designed alternative products using different chipsets. This way, customers get devices with the same features without the waiting times.



t SECTRON, we provide our customers with customer support. Thanks to integrated chat. we often advise on the product directly during the purchasing process. We were able to eliminate errors in orders right at the beginning. Hundreds of items are waiting to be shipped in our own warehouse. Our customers do not have to wait a long time for their goods. It goes without saying that we also provide our customers with after-sales support in

the form of a Hotline, where we help them to set up their equipment or solve technical issues. We can also handle customer requirements for modifying the goods they need, such as changing the type of connector or adjusting cable lengths for antennas. SECTRON has been here for customers for 27 years.



SECTRON S.R.O. JOSEFA ŠAVLA 12 709 00 OSTRAVA 9 CZECH REPUBLIC

SALES@SECTRON.CZ

+420 556 621 020