

USE CASE // SMART CITY

ETHERNET ROUTER FOR SMART GATE CONNECTIVITY

HIGHLIGHTS

Axess AG is an Austrian leading manufacturer of ticketing and access management systems, providing innovative services worldwide.

Its ticketing and access management system, the AX500 Smart Gate NG, together with the Smart Scanner 600 NFC, needs a connectivity device for real-time ticket validation and ticketing data transfer to its central control system.

The ideal choice is none other than Teltonika's RUTX10 Ethernet router, for its ability to support high data throughput and stable connectivity.

THE CHALLENGE – THE SHOW MUST GO ON

Watching your favourite team win a match or your beloved singer perform is always a memorable and joyful occasion. There's no doubt these spectacular events attract massive audiences. For instance, the ten largest stadiums in the world can fit over <u>100,000 viewers each</u>.

Although the show itself might be a once in a lifetime experience, we all know the struggle to get in or out of the stadium. Not only can it be uncomfortable, but also take hours of waiting.

Luckily, great innovations such as the Axess Smart Gate make this process significantly quicker. A perfect example of this is the <u>AX500 Smart Gate NG</u> developed by our Austrian partner, Axess.

These gates are linked to the <u>Smart Scanner 600 NFC</u>, equipped with <u>Near Field Communication (NFC)</u> technology. Once purchased online, the tickets are added to the NFC wallet. Guests can easily open them via Google Pay or Apple Pay and gain access to the stadium with a simple tap of their phone on an NFC reader.

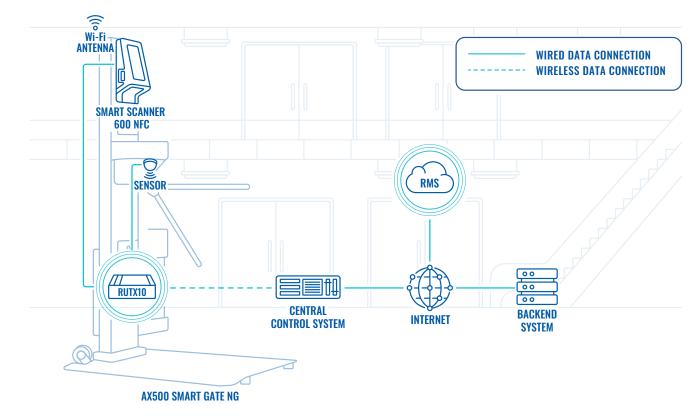
So, these gates not only support traditional ticketing methods like printed tickets, e-tickets, and QR codes, but also allow stadium access via NFC-compatible devices.

To enable real-time ticket validation and ticketing data transfer to its central control system, a stable connectivity device was needed.

Get ready to scan your tickets and meet the connectivity rockstar itself, the **RUTX10 Ethernet router**!



TOPOLOGY



THE SOLUTION – INVITING THE RUTX10 ON STAGE

Like a true legend, this Ethernet router is here to give a top-tier performance.

Firstly, the RUTX10 supports high data throughput – a necessary requirement for this use case. The Gigabit Ethernet router connects to the stadium's network via Wi-Fi.

This equips this Ethernet router with network connectivity and the necessary bandwidth and stability needed for real-time ticket validation to the Smart Scanner 600 NFC. By doing so, this Ethernet router transmits processed ticketing data from the Smart Scanner 600 NFC and sends it to a central control system.

This Ethernet router communicates via the Ethernet protocol with the Smart Scanner 600 NFC and with AX500 Smart Gate NG components, including control modules and sensors, to ensure smooth operation and data integrity. The control modules manage the gates' opening, closing, and ticket validation, while the sensors detect people approaching the gates and monitor their position.

This Gigabit Ethernet router is also equipped with four RJ45 ports for wired communication, Dual Band Wi-Fi for wireless, and Bluetooth LE for short-range communication. Let's not forget its support of a plethora of VPN protocols, such as IPsec, <u>ZeroTier</u>, OpenVPN, Stunnel, and many more for ultimate security!

Moreover, this RJ45 router is compatible with Teltonika's <u>Remote Management System</u> (RMS). It's an IoT platform, which allows remote monitoring as well as remote rebooting and troubleshooting connectivity issues. These remote capabilities increase operational efficiency by significantly reducing the time and effort needed for maintenance. Although these gates are generally compact, with minimal room for extra equipment, this Gigabit Ethernet router effortlessly integrates into the setup. With a compact size of only 115 × 32.2 × 95.2 mm, it fits right into the AX500 Smart Gate NG without taking up any unnecessary space.



In addition to that, our RJ45 router can withstand extreme temperatures from -40 °C to 75 °C and humidity levels ranging from 10% to 90%, non-condensing. Even when action heats up during games and performances, you can rest easy knowing your clients are having a great time – the RUTX10 has you covered!

According to our partner, the RUTX10 Gigabit Ethernet router was the clear choice because it offers a perfect balance of cost-effectiveness and reliability. Its industrial-grade quality ensures top-notch performance under any conditions, while flexibility works great in multiple applications where both wired and wireless connectivity are needed.

Don't let poor connectivity disrupt your event – grab the RUTX10 RJ45 router and let your clients enjoy their time, whether it's the thrill of a game or the sounds of music!

