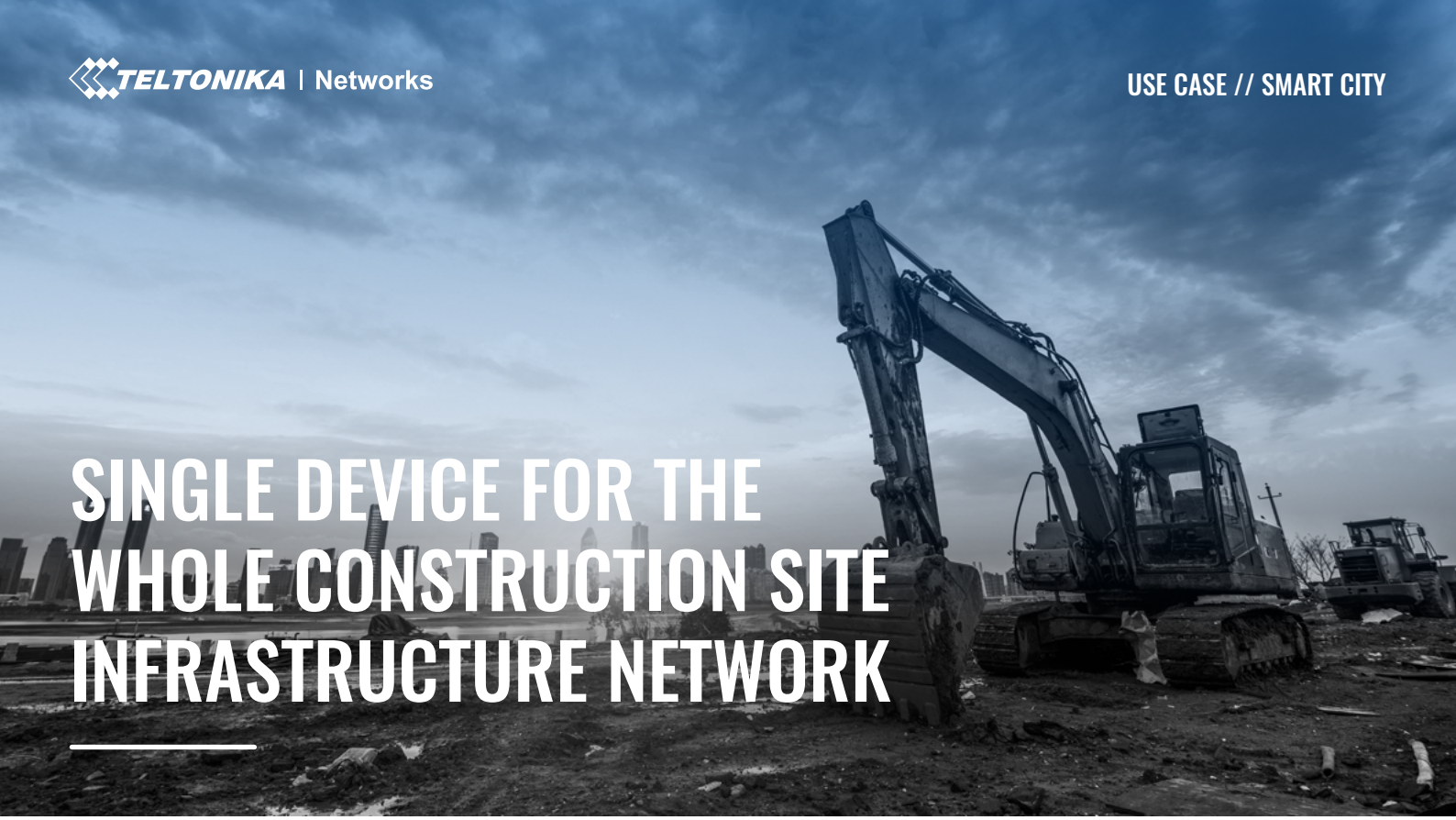


SINGLE DEVICE FOR THE WHOLE CONSTRUCTION SITE INFRASTRUCTURE NETWORK

SUMMARY

The IoT and digitalization are transforming every industry around us. The construction business is also implementing more and more intelligent equipment and processes required for surveillance and security of the site, employee monitoring, collecting data, or measuring productivity. While the benefits of using smart technologies in the construction industry are numerous, the implementation comes with a set of connectivity challenges caused mainly by the dynamic nature of the construction business.

CHALLENGE

While digitalization is picking up pace across most industries, the construction business requires a more tailored approach. Due to the temporary nature of construction sites, the solution needs to be time-sensitive, easy to deploy, and adaptable to every new project. Besides, the construction often occurs in remote areas with limited access to electricity, the internet, and developed infrastructure. Combined with harsh outside conditions and humidity, they require industrial-grade devices designed to sustain challenges like that.

SOLUTION

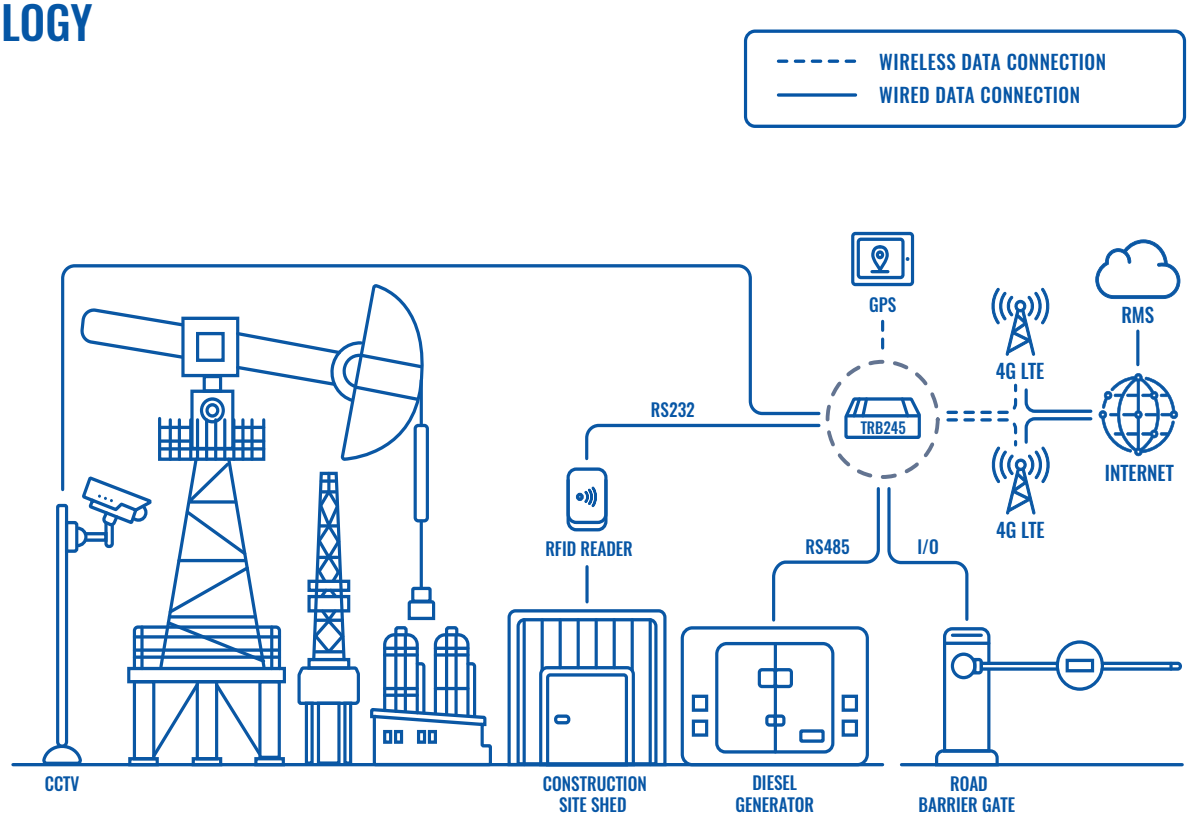
Many different elements need to connect to the internet on a construction site, including entrance gates, CCTV cameras, or even electricity generators and RFID readers. The problem is that they require a number of different connectivity options; hence it makes the setup process more complicated.

In this solution, the TRB245 gateway was a perfect fit that reduced the complexity and required time resources to get everything up and running. Featuring a combination of Ethernet and serial communication interfaces along with I/O ports, this device can quickly and effortlessly connect modern and legacy industrial equipment into one smoothly functioning solution.

TRB245 cellular gateway offers a possibility to use two SIM cards with automatic failover functionality. It enables not just a quick wire-free setup but also ensures connection continuity whenever the primary option fails.

TRB245 is a sturdy industrial-grade gateway stored in an aluminum housing and can withstand temperatures of -40 °C to 75 °C. It may also operate in humid conditions (10% to 90%), which is entirely sufficient for construction site requirements.

TOPOLOGY



BENEFITS

- Easily adaptable to new projects and locations - TRB245 gateway features various interfaces to connect multiple devices, including legacy equipment.
- Quick to deploy - TRB245 is a dual SIM cellular gateway, allowing for a wire-free setup that is much faster, easier, and more economical to set up.
- Rugged device - stored in aluminum housing, sustains heat and cold (-40 °C to 75 °C) and remains operational in up to 90% humidity.
- Backup connectivity - the possibility to use two SIM cards simultaneously and auto-failover ensures continuity whenever the primary connection is lost.
- Compatibility with RMS - enables remote management and troubleshooting for teams based in the headquarters.

WHY TELTONIKA NETWORKS?

Being highly experienced in the field, Teltonika Networks got the tools and the know-how required to seamlessly connect the various equipment found on construction sites into one secure network within a minimal amount of time. In combination with the Remote Management System, this allows saving on time and expenses while increasing efficiency in the fast-paced environment of the construction business.