Coronavirus outbreak has been around for a while now and affected most areas of what we used to call our everyday lives. Lockdown became a new reality, and various restrictions came in place: from requirements to wear face masks in public areas and social distancing to the closing of offices and public institutions. Most services, work, and education had to shift to an online model. While numerous events were canceled or rescheduled, and the pandemic staying with us for longer than expected, online streaming solutions started gaining popularity worldwide.

The transition to online streaming for concerts, sports, and cultural events was relatively simple due to having access to professional equipment, trained staff, and specialized premises. However, the need arose for a much more comprehensive range of pop-up events which were taking place in offices, schools, public institutions, or other similar environments (inside or outside) that are not suited for such purpose. In this use case, we review a solution for a remotely streamed graduation ceremony, where only students and academics attend due to health concerns, while the families can watch the live event online.

Since the solution is meant for pop-up events, the main requirements were simple set-up, ease of use, good quality stream, and high data throughput required to broadcast the live video via Youtube. A reliable and stable internet connection was also a must-have.

In this case, four cameras and a laptop connect to the Teltonika Networks RUTX14 professional router via Ethernet and uses a cellular connection for data streaming. While Gigabit Ethernet connection ensures fast and stable communication between the cameras, laptop, and the router, LTE Cat12 modem with load balancing offers enough speed and throughput to ensure an uninterrupted streaming experience. RUTX14 is the fastest-to-day mobile router in the Teltonika Networks range, able to reach download speeds up to 600 Mbps and up to 150 Mbps for upload.
Wave-2 802.11ac Dual-Band Wi-Fi on RUTX14 seamlessly connects various wireless elements, like a TV in this example, but it could also be tablets or other devices required for broadcasting and easy management of the event. Speaking of convenient management, the RMS IoT platform allows having a completely remote support mechanism, enabling to reach the router itself and the devices behind it for firmware updates and troubleshooting whenever needed.

**TOPOLOGY**

- The quick and easy setup allows using the solution in various venues and events without specialized training.
- Fast upload speed and high data throughput with LTE Cat12 module and load balancing ensure a stable, high-quality stream.
- Security is ensured not just for the data (by various VPNs and a Firewall) but also for people, allowing them to enjoy important events while meeting the safety requirements.
- Compatibility with Remote Management System enables remote updates and efficient troubleshooting in case of the unexpected.

**BENEFITS**

- The quick and easy setup allows using the solution in various venues and events without specialized training.
- Fast upload speed and high data throughput with LTE Cat12 module and load balancing ensure a stable, high-quality stream.
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- Compatibility with Remote Management System enables remote updates and efficient troubleshooting in case of the unexpected.

**WHY TELTONIKA NETWORKS?**

At Teltonika Networks, we do not offer just a product; we care about the whole solution. Having over twenty years of experience working with networking products and IoT awarded us with know-how and valuable insights we can now offer to our clients. We design, manufacture, and support our products in-house in Europe, enabling us to ensure the highest quality standards, competitive price range, and streamlined processes.