

# Ursalink Brings More Security to School Bus

Frankly speaking, school bus security is a major concern to all school employees and parents. News accounts appear almost weekly with a story of child left alone on a school bus for hours. Besides that, drunk driving is often a threat to school bus security. In order to eliminate these dangers, the Swedish system integrator Trinorth came to Ursalink for an advanced IoT solution.





## SOLUTION

All the strategic insights boil down to the same basic principles – ensure children's safety. We've done everything to deploy connected devices with high stability to improve the real-time monitoring and on-site visibility.

Our customers were in the search of a reliable and seamless cellular communication and they finally settled on Ursalink industrial cellular router for its top-ranking performance and high scalability.

The solution integrates passenger counter, alcolock, and Ursalink industrial cellular router.

The connection between passenger counter and Ursalink industrial cellular router relies on the Ethernet service of RJ45. The DI is used for connecting with alcolock, triggering the SMS/Email alarm, and DO is in the control of engine heater through SMS.

The driver needs to check his breath with the alcolock every time before he starts the bus engine. If the test result is negative, the bus will function properly. But if he failed, the system will lock the vehicle automatically, together with an alarm e-mail/SMS sending out to the remote server over 3G/4G network.

Second, with the engine heater, the driver can preheat the bus engine by sending an SMS and makes it start quickly regardless of the cold weather. And speaking of passenger counter, it is the most critical components of this solution, it helps school to checkin and checkout the number of children, prevent from stranding a child on the bus, and through Python programming, Ursalink router will receive all data from passenger counter, which greatly improved the efficiency.

With the solution adopted, our customers can make the most of their businesses and open up a new era of competitiveness, growth and put the children's safety at the forefront with a real return on investment.



### KEY BENEFITS

#### Streamline the Field Operation

With passenger counter and real-time data transmission capabilities enabled by Ursalink industrial cellular router, the number of passengers will be sent to the control center over 3G/4G and help admin to make sure loading and unloading are in a safe progress.

#### Scrutinized Security

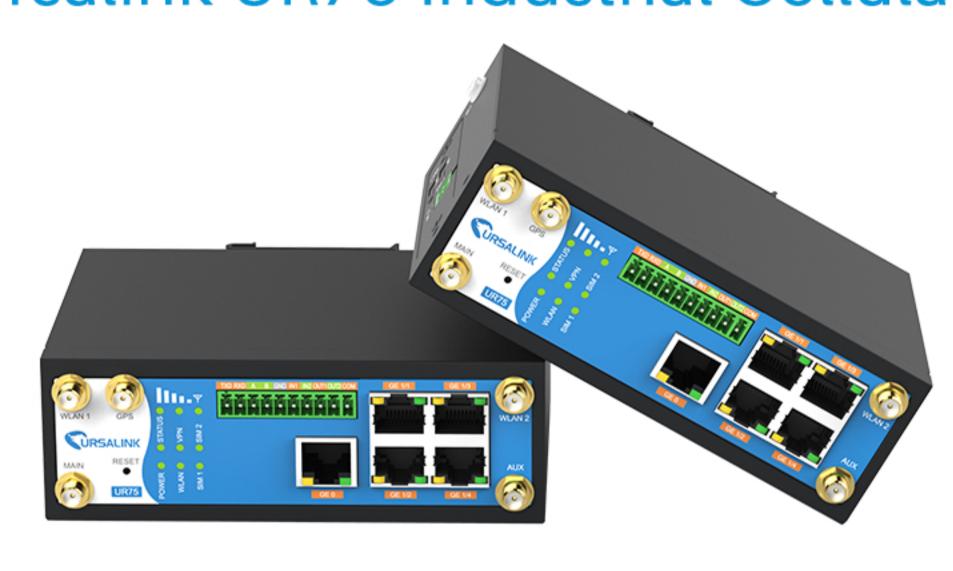
The Alcolock is placed as a safeguard to prevent any drunk driving from happening and maximizes the possibilities of driving home safely. Any positive test result will lead to engine locked and send SMS/Email alarms over 3G/4G to control center.

#### Increased Mobility and Efficiency

Remotely preheat bus engine at anywhere, anytime, in spite of the cold weather. By which will ensure maximum productivity of bus.

### 明星产品

#### Ursalink UR75 Industrial Cellular Router



- Features DI/DO, RS232, RS485
- Embeds Edge Computing Capabilities like Python SDK
- Gigabit Ethernet Port, 3G/4G, GPS, Dual SIM, Dual Band Wi-Fi complies with IEEE 802.11b/g/n/ac
- Supports Ursalink DeviceHub and IoT Platform such as Microsoft Azure, ThingWorx, AWS, etc.

### About TriNorth

TriNorth is a complete technology provider for public transport, construction and field operational companies for the Swedish and Nordic market. It offers a carefully selected range of products from manufactures belonging to the leading segment within its respective niche. Also, TriNorth offers standard components and systems as unique and customized solutions that are developed in collaboration between the customer and TriNorth. Today TriNorth products and solutions are present in one way or another in almost every public transport bus in Sweden.



Ursalink Technology Co., Ltd.

Tel: 86-592-5023060 Fax: 86-592-5023065 Web: www.ursalink.com Email: sales@ursalink.com