

SUCCESS STORY

LoRaWAN® Solution For Temperature Sensitive Vaccine Storage

In the after-COVID world, IoT solutions are being implemented to meet the rapidly growing needs of humanity. From high-density homes to workplaces and healthcare facilities, contact tracking, social distancing, and continuous health monitoring are being enabled through the use of IoT technology. Furthermore, the massive challenge of distributing a vaccine

to the world's farthest places has created an opportunity for IoT to ensure effective and reliable distribution.

With the **TEKTELIC TUNDRA Sensor** and **KONA Micro Gateway**, you can have reliable data collection and effective network connectivity - the perfect combination for your project needs.

**TUNDRA
Sensor**



**KONA Micro
Gateway**



- **Company:** Pilot Things
- **Country:** Canada
- **Type:** Health Care

- **Products used:** TUNDRA sensor, KONA Micro Gateway
- **Challenge:** Temperature Monitoring

CHALLENGE

In an effort to combat the global pandemic, an alliance of the world's leading researchers and pharmaceutical companies have collaborated to produce vaccines at an unprecedented rate. The next challenge was the distribution of these vaccines throughout the world, as well as the need for proper storage.

It has created a need for a reliable monitoring device to keep track of environmental conditions inside the storage, and in freezers, while in transit.





TUNDRA
Sensor

SOLUTION

To ensure that the vaccines are kept at the right temperature the Pilot Things has developed sensor app Vaccine Guardian that connects and monitors refrigerators used to store medical supplies like vaccines. With TEKTELIC KONA Micro Gateways and TUNDRA Sensors this app can be tailored to meet any need and ensures that data collection is never missed or delayed, even when the power goes out.

The TEKTELIC TUNDRA is the perfect choice for any setting. It uses the Vaccine Guardian Application to provide precise real-time data

on the storage conditions of the vaccine with its operational temperature range of -40°C to $+60^{\circ}\text{C}$ and a battery life of 10 years. The Vaccine Guardian system, in turn, keeps you up to date with real-time statistics and live updates on the vaccine storage conditions, so you can make any necessary modifications to guarantee the vaccine is stored safely.

Cal-Chip Connected Devices' Vaccine Guardian solution is the perfect combination of scalability, value, and performance.

CONCLUSION

With Vaccine Guardian, **medical centers, storage centers, and pharmacies can now track the temperature** of vaccine storage on their phones **in real time** and receive notifications of abnormal temperatures. The other benefits of the Vaccine Guardian solution are:

EASE OF USE

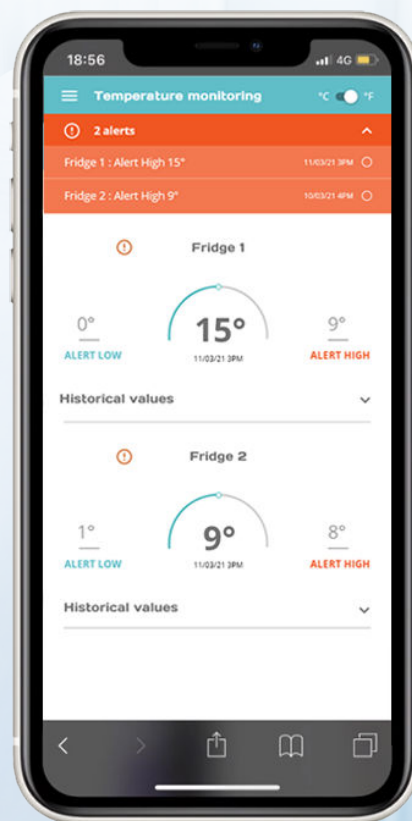
No wiring is required, just place the sensor.
Works with any type of refrigerator.

REAL-TIME

You can check the temperature and receive alerts from your phone in real time. Reports on historical temperature values.

ALWAYS-ON CONNECTIVITY

TEKTELIC KONA Micro Gateway ensures data is always collected, even in the event of a power outage.



The Internet of Things is expanding with exciting new LoRaWAN® end-to-end solutions, like Vaccine Guardian. This innovative sensor app connects to refrigerators used for medical supplies, monitoring them with TEKTELIC KONA Micro Gateways. It makes it easy to customize the system to your needs, providing fast and reliable data collection even without power. So, don't miss out on the opportunities and data updates with the Vaccine Guardian solution; **it's the perfect solution for your cold chain monitoring.**

**Contact us at info@tektelic.com to learn more
about cold chain monitoring solutions!**