



SUMMARY



Customer

Walton County Fire Rescue
Defuniak Springs, FL

Industry

Fire Rescue and Emergency Medical Services

Challenge

Temperature monitoring of medications for CAAS certification

Solution

- Wireless S-400 temperature sensors and gateways with an easy-to-use mobile app

Results

- Increased confidence for EMS crews in efficacy of medications they administer
- Simple, automated and accurate temperature monitoring to replace manual procedures
- Compliance with temperature monitoring requirements for CAAS certification
- Real-time alerts while crews are in the field via gateways onboard vehicles

Reliable, Automated Temperature Monitoring Solutions for CAAS Certification

Walton County Fire Rescue is a 130-member department providing fire suppression and fire prevention as well as emergency medical services in Walton County, Florida. Working out of 11 stations, the highly trained crews serve people living in a 760 square mile area north of the Choctawhatchee Bay. In 2019, Walton County Fire Rescue began working toward earning certification from the Commission on Accreditation of Ambulance Services (CAAS). Among requirements for certification is the ability to verify that medication stored in stations and carried in emergency vehicles have stayed within the appropriate temperature range.

Business Challenge

According to Tim Turner, Division Chief of EMS Training, Walton County Fire Rescue became part of the Walton County Sheriff's Office in 2017. Shortly after, Fire Rescue began working toward CAAS certification in September of 2019. "All the other departments under the Sheriff's office are accredited, including law enforcement and corrections," he says. "Sheriff Adkinson was eager for us to also be certified by one of our industry's leading accreditation agencies."

One of the regulations organizations must consider for obtaining and maintaining CAAS certification is verifying medicines and devices are kept within compliant temperatures, as outlined by the manufacturer and referenced in USP Guidelines. For much of the medication the Fire Rescue crews carry, this means either refrigerated temperature (36°F to 46°F) or controlled room temperature (68°F to 77°F) with allowable excursions. "While our medications were all kept in a climate-controlled environment, we had no formal process in place for monitoring and recording temperature data," explains Chief Turner.

As a first step, Kayleigh Sanders, the Accreditation Clerk for Fire Rescue, and Chief Turner started talking to other EMS providers about what they were doing as they also worked toward CAAS certification. "Many were monitoring and recording temperatures manually," says Chief Turner. "Overall, the results didn't seem to be meeting CAAS standards." When Chief Turner and Mrs. Sanders began digging a little deeper and doing their own research, they found Temptime.



S-400 wireless sensor monitors medication in coolers onboard rescue vehicles.



The wireless gateway is mounted on the station wall, and captures temperature data from the sensors as vehicles return to the stations

The Solution

Chief Turner and Mrs. Sanders settled on S-400 wireless, Bluetooth®-enabled sensors to monitor medication in storage areas on rescue vehicles, in drug bags and in supply rooms. Corresponding wireless gateways collect data when vehicles return to the station and store it in the cloud where it can be easily accessed or downloaded for generating reports.

The wireless gateway is mounted on the station wall, and captures temperature data from the sensors as vehicles return to the stations.

“We purchased 60 S-400 devices and 15 gateways, and now we have them pretty much everywhere,” says Chief Turner. That includes supply closets and refrigerators at each of their 11 stations as well as on their 6 primary ambulances, where they have a sensor in each StatPack™ and cooler. The gateways are installed at every station, except one. In this case, a gateway is installed directly on the two EMS vehicles working out of that station. With gateways in these Fire Rescue ambulances, the Division Chief of EMS Training can get alerts in real-time while crews are in the field. If that happens, they can quickly log in to the free mobile app or web-based system to see exact temperature exposures as they are happening.

“The sensors and gateways were easy to set up,” says Chief Turner. “And because everything is automated and cloud-based, I don’t need to rely on crews to log correct temperatures. It just takes stress away from them, which is important so they can concentrate on saving lives and putting out fires.”

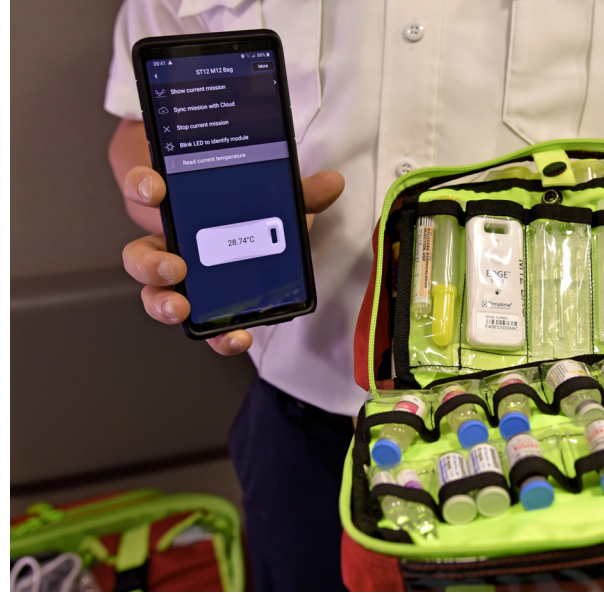
S-400 with EDGEBridge Gateway – Benefits At-a-Glance

- Monitors medication temperatures 24/7
- EDGEBridge gateway captures temperature data and automatically sends it to the Cloud
- Easy one-time ‘set it and forget’ temperature monitoring and alarm process
- Cloud-based access to historical data for medication stored onsite and in EMS vehicles
- Detailed reporting capabilities illustrate compliance to fulfill CAAS requirements
- Eliminates the temperature monitoring responsibility from the crews so they can focus on saving lives

The Result

The sensors have already helped identify medication that was exposed to excessive heat. “One of our coolers came unplugged,” explains Chief Turner. “None of the crew members noticed, and the medication became too warm. If it hadn’t been for the Temptime sensors and alarms, we might not have known – it’s likely someone would have just plugged the cooler back in without thinking. So, while we lost medication, we were able to quickly replace it with medication that had been safely stored at the correct temperature.”

Chief Turner says the sensors are invaluable also because they give him and his crews a new level of confidence in the efficacy of the medications they administer. “I would recommend this system to any organization applying for accreditation.”



Using the free EDGEVue mobile app on a mobile device, temperatures and alarms can be viewed on demand.



Kayleigh Sanders, Accreditation Clerk for Fire Rescue, and Chief of EMS Training, Tim Turner

Photos by Lindsey Darby, Public Information Officer

To learn more visit zebra.com



NA and Corporate Headquarters
+1 800 423 0442
inquiry4@zebra.com

Asia-Pacific Headquarters
+65 6858 0722
contact.apac@zebra.com

EMEA Headquarters
zebra.com/locations
contact.emea@zebra.com

Latin America Headquarters
+1 786 245 3934
la.contactme@zebra.com