CASE STUDY

How Stone Technology Uses the Uplink 5500EZ for Industrial Monitoring

Company Increased Annual Revenue and Improved ROI by Expanding Business Cases to Non-Security Applications

QUICKFACTS

Company
Stone Technologies Corporation (stonetechnology.com)

Customer Profile
Established in 1965, and headquartered in Salida, CO, Stone Technologies provides the following products and services:

- Products for the Security Industry
- Environmental Monitoring
- Alternative Energy
- Remote Monitoring Equipment & Services

Objectives
Stone Technologies wanted to expand its traditional alarm monitoring business into remote monitoring for industrial needs. This allowed Stone to add new revenue streams and services and grow their business.

Results
Breakdown of recurring revenue for Stone Technologies:

- Gross annual revenue from full service monitoring - $316,000
- Gross annual revenue from automated signal delivery - $40,000
- Net monthly revenue - $30,000
- Net yearly revenue - $102,000

Sierra Wireless Products and Services
- Uplink 5500EZ with cellular connectivity services

CHALLENGE

A few years ago, Art Stone, CEO, had an epiphany. Why not use the Uplink 5500EZ LTE alarm monitoring device for remote monitoring in other use cases and expand the business beyond typical security applications? Industrial monitoring seemed to be a perfect fit for the 5500 monitoring device.

As a result, three major industrial areas were targeted.

Radio tower light monitoring system

RADIO TOWER LIGHT MONITORING

For radio tower monitoring, the Federal Aviation Administration (FAA) and Federal Communication Commission (FCC) regulations require that lights be on all radio towers over 200 feet. These government agencies also mandate that the tower lighting be monitored for failure. Stone Technologies is using the 5500EZ, along with a special board adapted to the device, to monitor the lights turning on and off and transitioning from day operation to night operation. Additionally, Stone Technologies monitors for failures of the lighting circuits and for power failure at the site, which would be a catastrophic loss of the lights.

Sewer Lift Station Monitoring System

EMERGENCY GENERATORS

Another use case for remote monitoring with the 5500EZ is for emergency generators providing backup power to the grid. These generators are often in unmanned sites, and Stone Technologies monitors specific parameters from the grid, activating the generators running transfer switches to provide backup power in the case of a grid power failure.

Backup generator monitoring system

WATER/WASTEWATER LIFT STATION MONITORING

Another great use case for the 5500EZ is for water/wastewater stations, where it is used to monitor water levels, tanks and pump functions. With wastewater, Stone monitors the pumping stations to make sure that the sewer water is not overflowing, leaking or otherwise escaping. The same basic monitor inputs on the 5500EZ monitors the sewer lift station.

The sewer lift stations transfer the wastewater from lower areas to higher areas, so it can gradually flow down to the processing plant. A failure of a pump to run, or a power failure at an inland wastewater pumping station, could result in an overflow that would spill into an environmentally sensitive area like a creek and then trigger huge fines from the Environmental Protection Agency (EPA) for cleanup. It's easy to see that the potential losses by not monitoring the wastewater pumping station are enormous. Stone Technologies found that this makes it a pretty easy sell when you consider how much an EPA cleanup can cost. Typical EPA fines range anywhere from $4,000-5,000 and can be as high as $20,000-30,000 depending on how large the spill is.

These three non-security applications for industrial remote monitoring with the 5500EZ have resulted in a big increase in sales and additional recurring revenue for Stone Technologies.

Monitoring sewer lift stations allows checking for high liquid level in the wastewater pumping tank, power fail and operation of the second pump, which normally would not come on unless there was an extreme volume of wastewater coming in or a failure of one of the pumps. When the water level rises higher than it should, a secondary pump turns on to help lower levels. Stone Technologies uses the 5500EZ to monitor secondary pump action, power failures and water levels. If there is an emergency generator on-site, they can monitor from one of the other inputs and confirm that the generators come online.

Paying only one dollar a day to have these systems monitored makes a lot of sense, in order to avoid paying hefty government fines, prevent power outages and comply with governmental lighting regulations.

BUSINESS BENEFITS

- Cost savings
- Increased revenues
- Compliance with safety regulations
- Preventative measures to avoid fines

Stone Technologies offers a lifetime warranty on the equipment, as long as they are doing the monitoring, which has resonated with many of their customers because of the 2G to 4G/LTE transition.

Since it takes a lot of manpower and money to take the 2G SIMs out and put in the 4G SIMs, offering this service made Stone Technologies' customers very happy, because a typical trip to a tower site costs $600 dollars to roll a truck and have technicians look at the site. Stone's customers save a lot of money this way, because they were only charged $75 for a new Uplink 5500EZ communicator.

SOLUTION

Stone Technologies is currently monitoring well over a thousand radio tower sites and approximately 150 water wastewater sites.

Using an automated system where there's no operator interactive emergency, Stone Technologies charges $30 a month per device, roughly only $1 per day, including the fee for signal delivery. With a fully-interactive service, where the signals are handled by a live operator at one of two monitoring stations, they charge about $50 a month. Stone technologies sells the hardware solution up front for around $1,000 and then charges monthly for the service.

Contracts typically run for two years, and at the end of the second year they evaluate whether the costs for the recurring revenue have gone up and make an appropriate adjustment. Typically, every two years the monitoring goes up about a dollar a month.

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Stone Technologies projects that in 2019, current business efforts will result in a 10% rate increase and additional new accounts.

About Sierra Wireless

Sierra Wireless (NASDAQ: SWIR) (TSX: SW) is an IoT pioneer, empowering businesses and industries to transform and thrive in the connected economy. Customers Start with Sierra because we offer a device to cloud solution, comprised of embedded and networking solutions seamlessly integrated with our secure cloud and connectivity services. OEMs and enterprises worldwide rely on our expertise in delivering fully integrated solutions to reduce complexity, turn data into intelligence and get their connected products and services to market faster. Sierra Wireless has more than 1,300 employees globally and operates R&D centers in North America, Europe and Asia.

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