



AGM Creates Revolutionary New SCADA Communication Tool with CalAmp Solutions



R-WIN INSIDE: A NEXT-GENERATION SCADA COMMUNICATION TOOL FOR IIOT

CalAmp's customer and partner, AGM Communication & Control, provides smart solutions for Distributed Control Systems (DCS) and SCADA (supervisory control and data acquisition) networks for Water & Wastewater, Oil & Gas, Energy and Environmental real-time monitoring and control. AGM specializes in cost effectively upgrading and optimizing distributed control networking projects by deploying innovative technologies. Their solutions are currently in use throughout the Middle East, Europe and South America.

THE CHALLENGE

TODAY, INTEROPERABILITY IS A CHALLENGE. COMMUNICATING BETWEEN PROGRAMMABLE LOGIC CONTROLLERS (PLCS) FROM DIFFERENT VENDORS AND WITH OTHER PERIPHERAL DEVICES ON THE SAME SYSTEM PRESENTS DIFFICULTIES.

Industrial IoT companies rely on remote devices to control, monitor and maintain the health of their systems. The RTU, or remote terminal unit, transmits telemetry data to the PLC via the DCS or SCADA system and uses messages from them to control connected objects. For example, oil and gas companies need to know the status of pressure and volume on their pipeline. They may need to open or close valves depending on the conditions, which operators would do by communicating with the RTUs.

When updates to the hardware were required, these companies were faced with limited options. They could either buy more devices from the same vendor, which was restrictive. Or, they could purchase from another manufacturer and then invest more time and money to have their SCADA integrator reprogrammed.

THE SOLUTION

AGM SAW THE OPPORTUNITY TO DEVELOP A SOLUTION THAT WOULD PROVIDE SEAMLESS SCADA COMMUNICATION REGARDLESS OF THE PLC MANUFACTURER OR SPECTRUM USED.

In search of a partner to help them, AGM turned to CalAmp, which designs and manufactures a range of industrial routers equipped with CalAmp's Open Developer Platform™ (ODP). AGM was specifically interested in ODP's ability to provide its firmware developers with an environment to build intelligent processing and custom applications to facilitate distributed intelligence and local decision making at the edge of the network.



CalAmp Vanguard and Viper SC+ with AGM's R-Win Inside



R-Win Inside allows us to provide better service to existing clients and will allow us to approach new market segments that were reluctant to implement additional hardware in their network. We expect R-Win family to grow in the future to other wireless devices and create a more robust and reliable communication solution.

Oran Drach, VP Business Development, AGM



AGM was also interested in CalAmp's Vanguard 5530 broadband LTE cellular router which comes enabled with ODP and provides reliable connectivity for PLCs, RTUs and any other Ethernet or serial device. With the Vanguard 5530 enabled with ODP, the computing environment and intelligence can be pushed out to the router and extended to the network edge. With these tools now available to them, the AGM developer team set out to build an embedded application that would eliminate the need for costly reprogramming when new PLCs or devices are added to an existing DCS.

THE RESULT

A REAL-TIME COMMUNICATION DATA MANAGEMENT SOLUTION FOR DISTRIBUTED NETWORKS.

The AGM team developed its R-Win Inside solution, a scalable SCADA communication tool box that enables industrial IoT companies to communicate with PLC's from different vendors on their distributed network regardless of protocol type or spectrum used and without changes to existing software. This means that the solution is vendor and spectrum agnostic. It has easy to setup parameters that can be used with one location and then increased over time as the system grows.

"CalAmp ODP was an important tool in bringing this new capability to the industrial market. Now AGM can provide more efficient and reliable telemetry data communications without the hassle of costly reprogramming." Oran Drach, VP Business Development, AGM

The major benefits of R-Win Inside on the Vanguard 5530:

- Freedom to select the right solution instead of a current vendor or communication spectrum
- Flexibility to mix and match system components
- Eliminate reprogramming time and expense to the existing PLC software
- Create additional redundancies through parallel connections for improved system integrity

By combining AGM's R-Win programming technology with CalAmp ODP and Vanguard 5530, operators of distributed networks finally have the ability to scale their SCADA communications seamlessly.