SIMPLECOM MOBILE KITCHEN UNIT PROTOTYPE

HIGH POINT, NORTH CAROLINA, UNITED STATES

INTRODUCTION

SimpleCom provides simple, real-world solutions for a range of fixed and mobile communication challenges. Reliable Controls Authorized Dealer <u>Building Automation Services</u> worked with SimpleCom on a prototype mobile kitchen unit intended for disaster response and sporting events.

PROJECT DETAILS

Building Automation Services installed a MACH-ProWebSys in the prototype structure, which allows internet access and control using its powerful built-in web server and includes a BACnet Operator Workstation that renders HTML5 animations on Reliable Controls System Groups, which operators can also view locally on a tablet. The team installed a MACH-ProView LCD with VOC sensor to control the water meter and measure particulate matter. The MACH-ProView LCD provides a range of high-resolution graphical interfaces that allow operators to access, control, and monitor comfort and energy use in the mobile unit.

A MACH-ProLight controller and EnOcean Transceiver act as an EnOcean gateway that receives information from kitchen equipment, including several commercial refrigeration units and a fume hood. The building automation system also communicates with an exterior heating/cooling unit, 240 VAC diesel generator, and 1,364-liter water-storage tank.

The modular folding design of the kitchen and its equipment meant many sensors and devices needed to be wireless for easy transport and removal. Building Automation Services integrated third-party wireless DPI stiches; temperature, smoke, and humidity sensors; bullet-probe thermistors; and air differential pressure switches using a Reliable Controls EnOcean Transceiver.

Inconsistency between the supplied drawings of the structure's interior layout and the actual building presented a challenge for Building Automation Services, whose diligence and flexibility allowed them to make last-minute changes to resolve this issue.

The prototype building has attracted interest from customers all over the world, and SimpleCom projects sales in the thousands. Reliable Controls and Building Automation Services were happy to meet the needs of this project with a sustainable, cost-effective control solution.

Interested in Reliable Controls technology for your next project? Find an Authorized Dealer near you: reliablecontrols.com/sales

Explore other Reliable Controls projects: reliablecontrols.com/projects/profiles



© 2022 Reliable Controls Corporation. 120 Hallowell Road, Victoria, BC, Canada, V9A 7K2 Toll Free 1-877-475-9301 . Tel 1-250-475-2036 . Fax 1-250-475-2096



Market segment Industrial

PROJECT TYPE New

INSTALLATION TYPE HVAC

Total area 37 m² (400 ft²)

PROTOCOL BACnet

INSTALLED EQUIPMENT 1 EnOcean Transceiver[™] device 1 MACH-ProLight[™] controller 1 MACH-ProView[™] LCD controller 1 MACH-ProWebSys[™] controller

INTEGRATED EQUIPMENT ACI BACnet MS/TP power meter

TOTAL SYSTEM OBJECTS 289

RELIABLE CONTROLS AUTHORIZED DEALER



Building Automation Services

ASTRAE BACnet