



Hittite Project Profile

Tridium Technology

Project at a Glance:

Type: Systems Integration
Vertical Market: Commercial Office
Location: Chelmsford, MA
Size: 105,000 SF
Products: Trend, Carrier, Tridium
Installation: 2010

Customer Benefits:

- Energy efficiency
- Centralized monitoring and control
- Remote alarm notifications



Project Overview

Hittite Microwave Corporation is a manufacturer of analog/digital microwave integrated circuit components for broadband, cellular and microwave applications. The company is headquartered in Chelmsford, MA. Hittite was expanding to an existing 105,000 SF facility with rudimentary building controls. As part of the tenant fit up renovation, Hittite wanted to install a Building Automation System (BAS) that would provide Direct Digital Control (DDC) and Energy Management functions.

The Solution

FMC Technologies was hired to install a complete Building Automation System including DDC of all new and existing HVAC equipment.

The key to the success of this project was the Tridium Niagara framework utilized for the hardware and software integration. Tridium integrates diverse systems and devices into a unified platform that can be easily managed and controlled in real time over the Internet using a standard web browser. FMC was able to integrate Trend and

Carrier products through a Tridium web-based front end. The flat, open architecture allows for control and monitoring of all new and existing building systems regardless of manufacturer or communication protocol. FMC installed Trend BACnet Direct Digital Control hardware and provided integration to Carrier's rooftop units.

Tight temperature and humidity control while minimizing energy used for the HVAC equipment was achieved by utilizing application programs such as DDC, Equipment Scheduling, Unoccupied Setback/Setup, Optimized Start/Stop, Temperature/Pressure Reset, Economizer Control (enthalpy), and Trend/Alarm Program.

The Bottom Line

The new BAS has provided numerous benefits to the customer. Increased control, performance efficiencies and reduced operating expenses top the Facilities Manager's list of improvements. Hittite qualified for National Grid's utility incentives and received \$32k in rebates, making the simple payback less than 1.5 years.