Case Study

BubblyNet

CareFirst BlueCross - Columbia, MD

The Challenge

The client required a sophisticated lighting control system for an 80,000 sq. ft. corporate office that could support dynamic occupancy response, daylight harvesting, AV integration, and full lighting and receptacle control, all while maintaining energy efficiency and user comfort. The system needed to react instantly to occupant presence, adjust lighting levels in adjacent zones, and support multiple communication protocols, including 0-10V and DMX. The project demanded a robust, scalable solution that could be tailored to the unique demands of the space, including open office areas, private offices, and shared amenities.

The Solution

A BubblyNet Bluetooth Mesh system was deployed across three floors, integrating over 600 nodes with custom firmware to enable advanced control logic and seamless mesh communication. Occupancy sensors were programmed to immediately trigger lighting to high set points within occupied zones, while setting 20% lighting level in adjacent unoccupied areas for visual consistency. Day-lighting zones were established with primary and secondary configurations to maximize energy savings and leverage natural light. Full integration with 0-10V and DMX protocols supported detailed lighting and AV scene control, while unified lighting and receptacle control delivered centralized energy management. The result was a responsive, intelligent, and future-ready lighting system that enhanced both efficiency and user experience.