



WASHINGTON MALL

CHALLENGE

Washington Mall is the largest shopping Mall in Bermuda with over 100 retail tenants, over 66,000 sq. ft. of retail space and 138,000 sq. ft. of office space, along with 5 penthouse apartment. Located in the heart of Hamilton, Washington Mall is the island's busiest shopping centre, with a variety of shops, restaurants and other services of interest to local residents and visitors alike

The Mall had an existing metering solution wired into their internal BMS infrastructure. Whilst this provided a baseline for energy consumption, and enabled some sub-metering of tenanted areas, a significant amount of human interaction was still required to produce monthly tenant bills. As the Mall expanded and tenants changed, they needed a solution that could grow and develop with them, without significant cost or delay to the billing process.

Synetica were commissioned by the island's premiere energy specialist — Noesis Consulting — to provide the Mall with a retrofitted metering solution and wireless communications network that could be scaled up to meet future changes and integrate with their existing system, consolidating estate-wide data into a single dashboard and tenant reporting solution.

The project

The Mall, owned by Peel Group, worked with Synetica to find a solution that would build on their existing metering. Within the Mall, their current metering and monitoring relied on their internal BMS, in conjunction with manual readings and spread-sheet calculations. The property management team wanted a solution that would monitor meters automatically, in order to provide a complete picture of energy consumption that matched their utility bills and provide an accurate tenant billing.

The solution

An Automated Meter Reading (AMR) Wireless Wide-Area Network was needed so that the data could be transmitted from anywhere in the building, independent of the Malls existing IT infrastructure and communications systems. Local Synetica DataStream loggers collected data from the meters, providing data concentrating and buffering. Along with wireless repeaters, this provided a robust and secure network solution with site-wide coverage, whilst avoiding any disruption to the existing Mall BMS and Wi-Fi communications infrastructure.

Synetica wireless enLink meters were retrofitted to landlord main plant and common areas, with DataStream loggers collecting data from the 800+ existing meters.

As the enLink wireless network has its own receiver and utilizes the clients existing IT network, there are no ongoing costs or fees associated with the data collection or communications network.

From initial scheduling, the project was completed in under six weeks, with the team operating within stringent procedures to ensure no retail tenants or visitors were affected by the works.



CASE STUDY

Project Benefits

Visibility into energy consumption and cost

Real time monitoring of tenant utility costs using web-based energy dashboards

Real-time, automatic creation of tenant bills

Accurate and reliable collection of meter data from over 800 meters

Identification and verification of energy efficiency projects

Flexible wireless metering dramatically reduced installation time and site disruption

Contact Us

Synetica Limited

Hilton House
High Street, Stone
Staffordshire
ST15 8AU

t: +44 (0)1785 818919
f: +44 (0)870 705 2387
e: info@synetica.net
w: www.synetica.net

The results

The end result was a wireless sub metering system that was quickly and easily installed across the whole Mall. It can be scaled up as unit refurbishments occur, new tenants added or additional data needed.

Synetica integrated data from the Mall's existing wired BMS BACnet system. All data transfer is via the cloud to Synetica's enVision software analytics platform, providing a single dashboard that simplifies the huge amount of data collected but still enables the user to drill down into detailed analysis.

Where previously manual reads and complex spreadsheets were needed, the new system provides a complete overview of accurate, real-time data that can now be used for bill validation, tenant billing, and energy efficiency monitoring.

As the landlord continues its drive to make energy efficiencies and achieve financial returns on their energy efficiency investments, the data derived from this wireless metering solution will be a key influencer in their future energy strategy, whilst providing clear 'back-up' data for tenants requiring insight into their bills.



“Synetica’s automatic meter reading system has given us reliable, real-time metering data - enabling us to provide timely and accurate billing of our tenants, whilst being flexible enough to handle the evolving use of our building”

Benefits:

- ✔ Scalable metering that can expand and change as the retail space evolves
- ✔ Real-time data for tenant meters enabling accurate and traceable tenant bills
- ✔ Single system integrating existing data collection with new solution
- ✔ Reduced maintenance costs
- ✔ No ongoing data transfer costs or fees
- ✔ Open data format for easy integration and no single vendor 'lock in'.



Products used:

- ✔ Synetica enLink Wireless electricity meters
- ✔ Synetica DataStream Energy Loggers
- ✔ Synetica Protocol Gateway
- ✔ Synetica enVision energy analysis and reporting application