

CASE STUDY

OFFICE POWER MONITORING

PROBLEM STATEMENT

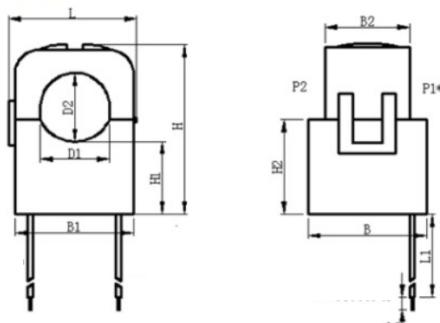
New commercial buildings often have excellent instrumentation in place for their central air conditioning system and other major equipment, but the tenanted areas are left out. This client requested a tenant-space energy monitoring system to understand receptacle (plug) load and lighting load within the office, better attribute cost to departments, and identify opportunities for energy savings. Once deployed, the energy usage data would be shared and integrated with other smart office technologies.

CLIENT COMPANY OVERVIEW

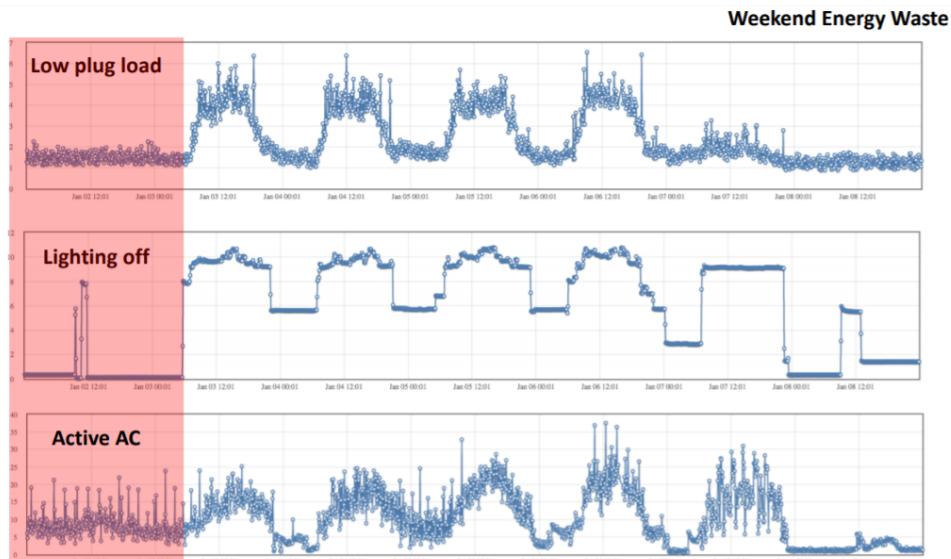
- International commercial property developer
- Active in office and retail space
- More than 100 properties

SOLUTION IMPLEMENTED

Ampotech installed a power monitoring system in 10 electrical panels in the building. These panels were spread across 5 zones that separated various departments, meeting rooms and common areas. Multiple AmpoHub devices were installed in each panel to provide complete coverage of every electrical circuit. 3G routers were deployed to create an IoT WiFi network that connected the AmpoHubs to the AmpoCloud platform.



RESULTS



Over 6% monthly energy savings from detecting and avoiding lights left on during nights and weekends

Bench-marking energy performance by *kWh/m² per year* showed that this site is in the **top 50% of Singapore's office buildings**

Power density (W/m²) for lighting occasionally exceeds the design guideline of 12 W/m², indicating **potential for further savings via lighting control or retrofit**

ABOUT AMPOTECH

Ampotech is a Singapore-based company specializing in the collection and analysis of electricity usage data from the built environment. Ampotech's products use non-invasive sensing technology to provide circuit-level energy usage data that can be attributed to specific spaces or equipment in a facility in real-time. Since launching in 2015, Ampotech's products and software have been used to identify energy conservation measures for commercial and light industrial facilities, and to perform remote asset monitoring for infrastructure savings via lighting control or retrofit.