

Remote Power Data Logger

Custom Hardware Design

Embedded Firmware

Wireless Connectivity

Reporting Application

CLIENT

An in-house product developed by Embin for sites needing remote logging of power parameters.

THE PROBLEM

Some sites needed a record of their power usage over time — for billing checks, documentation, or internal MIS reporting — but didn't have a wired network connection to rely on, and weren't going to get one any time soon. A logger that only worked over Ethernet was useless to them, but a logger that only worked standalone meant someone had to physically visit the site to retrieve the data.

WHAT WE BUILT

We designed the logger to not assume any particular connectivity. It records power parameters continuously into its own memory regardless of what's available, and then gets that data out using whichever path the site actually has — a direct wired link if there's a PC nearby, or the cellular network if there isn't. On the receiving end, we built a desktop application that takes the logged data, however it arrived, and turns it into the kind of report a facility manager or compliance officer would actually want to read, rather than a raw data dump.

WHAT IT DOES

- ✓ Continuously logs key power parameters into onboard memory, independent of any network connection
- ✓ Sends logged data over a direct wired link when a PC is on-site, or wirelessly over the cellular network when it isn't
- ✓ Desktop application converts logged data into formatted reports ready for documentation or MIS use
- ✓ Works at sites with no permanent network infrastructure, removing the need for site visits to retrieve data
- ✓ Same logger and reporting workflow regardless of which connection method is used at a given site

OUTCOME

Sites that previously had no practical way to log power data — because they lacked network infrastructure — got the same reporting capability as fully wired sites, without anyone needing to travel out to collect readings.