invisible systems
DELIVERING INFORMATION

Lloyd's Register
Fenchurch St London

£34 k savings

23 Month ROI

MID Compliant metering and Energy Targeting solution

> *This metering upgrade installation, provided more accurate consumption reporting, automated tenant billing and is likely to provide payback on investment of less than 2 years.*
>
> **Head of Facilities**

From our initial engagement, the challenges Lloyd's Register faced with the existing sub-metering installation were typical of most commercial buildings. Over time, the infrastructure, office layout and electrical distribution all change, get added to and updated in parts. This leads to inconsistency in the meter types, location and access and with changes in tenants, possible issues with metering consumption correctly. In addition, manual meter reading impacted efficiency of facilities human resources.

Project Objectives

Customer needs:

- ✓ Meet Legislation for Tenant billing
- ✓ Provide accurate billing
- ✓ Reduce manual resource
- ✓ Establish energy savings
- ✓ Understand utility consumption
- ✓ Limit impact day-to-day office use

Project Outcomes

How we helped:

- ✓ MID Compliant Dual tariff meters
- ✓ Accurate consumption in real-time
- ✓ Automatic tenant billing module
- ✓ Eliminated manual reading errors
- ✓ Targeted demand reduction

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This Case Study is based on Solutions provided by Invisible Systems Ltd.

Lloyd's Register

The system allows a single meter or multiple meters to be grouped and assigned to a Tenant. Each month the system compares previous reading to the present reading for each meter and for each tariff (high/low) and generates a bill automatically as pdf report.

"As a project, this was one of the smoothest, for which I thank the whole Invisible Systems team."
David Kelly

Solution
Our solution replaced all existing sub-meters, 57 in total with a single MID Class dual tariff meter, suitable for tenant billing and aM&T.

The new meters automatically read in real-time and report via Ultra RF wireless Modbus transmitters, avoiding intrusive, complicated and expensive cross-site wiring.

The local Modbus transmitters connect via long range 868Mhz RF (up to 15km line of site) to our central GSM RF Gateways, located in the building, which upload data to the cloud reporting suite.

Outcome
Configuring the system to accurately represent tenant occupancy, reporting accurate and aligned consumption with true energy cost, have resulted in significant financial savings through correct billing. Further savings have been made from reduced manual labour previously doing metering readings and preparing tenant bills.

Finally, all non-tenanted areas have been grouped by floor to provide a granular picture of consumption to target waste, improve demand reduction and identify exceptions via email notifications sent out by the system.

Benefits

- ✓ Low cost system, simple install
- ✓ EN50470-1/-3 Compliant (MID)
- ✓ Non intrusive installation
- ✓ No impact on building / Tenants
- ✓ Easy to use, cloud based reporting
- ✓ Reduced manual labour
- ✓ Eliminated errors
- ✓ Expandable

MID (Measuring Instruments Directive - 2004/22/CE) is a 2004 European Directive applicable to measuring devices and systems in the context of commercial transactions. The aim of the directive is improving protection of consumers and safeguard their interests.