

ITM Solution Brief

Intelligent Buildings



ITM Communications is an independent specialist provider of cost effective and energy efficient ICT infrastructure services and solutions to the corporate, financial, government, defence, healthcare, construction, systems integrator and outsourcer markets in the UK, Europe and Middle East.

Building Intelligence

Intelligent buildings use networked technologies to enable systems to respond to their natural surroundings and maximise the effect of environmental factors such as the ambient temperature, sunlight and wind.

For example, in order to benefit from the sun's heat and light, an intelligent building ensures that multiple control systems work in harmony to switch off unnecessary lights and adjust heating and cooling output accordingly.

A number of important dynamics are driving the market for such energy-efficient, environmentally responsible intelligent buildings, including:

- Environmental legislation such as the Carbon Reduction Commitment (CRC)
- Corporate social responsibility
- IP technology convergence
- Cost saving

Intelligent buildings are changing the way the IT, Construction and Building Service markets operate. Owners, managers and occupiers of commercial properties are demanding new services and solutions that enable energy efficient, flexible and cost effective work environments. Such demands are challenging the traditionally separate approach to service provision and now require service providers to apply new thinking and innovation.

ITM Solutions

By combining traditionally separate businesses into a unique, converged organisation, ITM is able to offer clients a complete end-to-end intelligent building service, removing the need to engage with multiple organisations, while leveraging the wide skills, experience and resources within the group to create a truly integrated solution.

ITM combines its core skills of communication and control to resiliently network multiple building services over a single IP based cabling infrastructure and utilise open protocol methods such as BACnet, LonWorks or Tridium.

Example energy saving solutions include:

- Installation of lux sensors, dimmers, infra-red detectors and timers throughout the building to ensure systems operate only when required
- Refit variable speed drives to all significant motor units to ensure drive power matches the demand
- Stage and re-sequence boilers and other key plant and equipment to minimise energy wastage and duplication
- Undertake ongoing data extraction, enthalpy recalculation and set-point re-configuration to ensure optimal energy performance of all major systems
- Establish direct user environmental control from common devices such as PCs or IP phones to empower employees to save energy
- Integration and optimisation of green technologies including Ground Source Heat Pumps, Combined Heat and Power, Biomass Boilers with core building management systems
- Configuration of an Energy Dashboard software platform to display key energy consumption indicators and benchmark data on plasma screens, extranets and intranets

These intelligent solutions deliver tangible improvements, benefits and advantages throughout the corporation, for example:

- Up to 30% per annum reduction in operating and maintenance cost
- Up to 40% reduction in energy consumption
- Measurable reduction in carbon footprint
- Enhanced working environment for occupants
- Legislative compliance and accreditation, such as CRC, EPBD (e.g. BREEAM, Part L and CCL)
- Improved security and safety
- Increased flexibility to support re-organisation and changes
- Elimination of sole supplier lock-in contracts

These intelligent solutions deliver tangible improvements, benefits and advantages throughout the corporation, for example:

- HVAC
- Lighting
- Security
- Life systems
- Green technologies
- Building Energy Management Systems
- AV
- Cashless vending
- IPTV



Example of a Carbon dashboard

By adopting a flexible approach to client requirements, ITM applies best of breed technology, in-house expertise and innovation, to deliver compliant solutions and services that offer value for money and achieve industry best practice.

ITM Communications Limited

41 Alston Drive, Bradwell Abbey, Milton Keynes, Bucks, MK13 9HA, UK

TEL: +44 (0) 1908 318 844

FAX: +44 (0) 1908 318 833

EMAIL: enquiries@itm.uk.com

WEB: www.itm.uk.com