

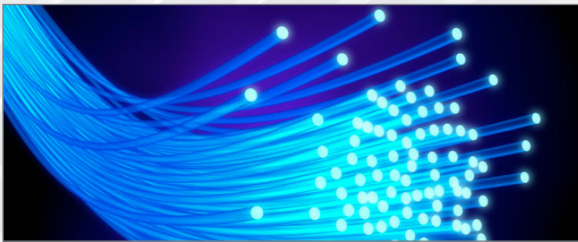
The regeneration of our towns and cities and integration of communal systems, provides the perfect opportunity to lay the foundations of a communications infrastructure that will serve our communities for generations to come.

Next generation fibre optic systems enable housing providers to offer a wide range of services, all combined using one network.

For new build and existing housing, fibre optic networks are perfectly matched to deliver the internet of the future and support those services that users already enjoy.

An Integrated fibre optic infrastructure can provide:

- o **ModuSat® Smart Metering and remote surveillance** - providing full visibility of energy usage and remote control of the heating and hot water system.
- o **Integrated Reception System (IRS)** for TV & Radio services - Sky, Freesat, Freeview, DAB Radio, FM Radio.
- o **Broadband network** to provide High Speed Internet, telephony and IPTV services.



Typical Fibre Optic Network Set-up



Features & Benefits

- Hard-wired fibre optic cabling network around building / scheme.
- Meters read remotely via Broadband communication system.
- Super-fast data transfer.
- Simplified installation and reduced costs as network can be shared with other systems, such as TV & Radio services, BMS, alarm systems, broadband High Speed Internet and others.
- Attractive to residents, with various services available immediately when they move in.
- ModuSat is the only unit available with integrated TCP/IP technology, which enables the connection to a fibre optic network.
- SmartTalk® Data Logger collates meter information and sends data to remote monitoring office and vice versa allowing communication back and forth.
- Two-way communication enables the system in each apartment to be fully controlled remotely, including timings and settings, and provides remote diagnostic capability and client support.
- TCP/IP data network provides real time data modelling. For example this may include:
 - o System diversity modelling
 - o Energy usage modelling
- Removes the requirement for a Bus network or any amplifiers.

Details

Converged Networks for Smart Buildings Fibre Optic

Our range of ModuSat HIU's feature integrated TCP/IP technology, which makes them well suited to this type of network, as they simply connect to the fibre optic network to provide a full metering, billing, control and communication solution.

This allows for the following:-

- Meters are read remotely.
- Smart metering system provides residents with energy usage information to promote efficiency.
- Pre-payment and credit billing services – with online account and payment facility.
- The system in each apartment can be fully controlled remotely, including timings and settings, and provides remote diagnostic capability and client support.
- Fault alarms can be checked by testing the operation of components.
- Online App control facility allows occupiers to set heating and hot water remotely and view consumption using any web enabled device.
- Empty apartments can be monitored and controlled without the need to visit site.
- Avoids unnecessary call-outs as a result of user error.

Meters read remotely

Our experience of communal heating has shown that reading energy meter's remotely is the most straightforward and efficient way of gathering accurate readings. The main benefit of this technology is that it eliminates the requirement for time-consuming and costly visits to each unit or dwelling, while at the same time ensuring the most up to date information is captured every time.

Technical details

- A fibre optic infrastructure is extremely space efficient and can replace a number of bulkier conventional cabling infrastructures
- A central Communication Room typically of 3m x 2m with a 3m ceiling height is required
- Riser space and horizontal cable routing throughout each building to enable direct connection from the Communication Room to each individual apartment
- There is no requirement for power in the risers as the entire network is passive between the Communication Room and the apartments

Exceed expectations for luxury developments

The availability of an open access network allows the owner or developer of a new scheme to market their properties to discerning clients, who demand the best and who expect world class facilities to be available from the first day of occupation.

For prestigious housing developments, the provision of a state-of-the-art communication network is vital to attract the desired demographic. By offering a network with high speed, integrated services from the outset, you can secure your customers ahead of the competition and significantly improve the rate of return on your investment.