

## FAQ sheet Number 4 CoP5 Electricity Meters

*“As a consultant I often get involved in commercial and industrial developments that require metering but I am confused by some of the terminology used, in particular the term CoP5. What is a CoP5 meter and how does it differ from an Ofgem approved meter?”*

Schedule 7 of the 1989 Act makes it clear that if a meter is to be used for billing purposes it must be of an approved type. As the sole approval authority in the UK is Ofgem, the Office of Gas and Electricity Markets, the meter must be Ofgem approved. Claims of approval should not be taken at face value; this is a requirement of the Act so make sure that a copy of the approval certificate is provided by the meter supplier.

A Code of Practice 5 meter (CoP5) is a “smart” Ofgem approved meter designed for load profiling and Automated Meter Reading (AMR). All UK sites above 100kW and below 1MW will have a CoP5 meter installed on the main supply and each meter will be read remotely on a daily basis for billing and settlement purposes. Sites above 1MW have CoP3 meters fitted. The specifications for CoP3 and CoP5 are similar enough for the meter manufacturers to supply equipment that comply with both standards.

*“So what are the benefits of installing a CoP5 meter rather than a basic Ofgem approved meter and what are the additional costs involved?”*

CoP5 meters are designed not only to be extremely accurate but also to be capable of reporting connection faults. Over the years many tenant metering projects have been blighted by incorrectly installed meters. One of the great benefits of CoP5 meters is that, on interrogation, they report faults due to incorrect installation or tampering.

As serial communication is standard, CoP5 meters can be read locally or remotely via telephone, GSM and even through the standard CAT5 cable network using a special TCP/IP LAN modem. Both landlord and tenant can obtain precise meter readings without having to visit site and this can be achieved using a PC running inexpensive software. In addition, pulse outputs are always available should the landlord want to recover data via the Building Management System. Where meters are located in switch rooms or riser cupboards, the network capability of CoP5 meters can be invaluable in helping to keep communication costs and call charges to a minimum.

All CoP5 meters log half hourly consumption data so that in addition to bills, tenants can be provided with very useful load profile data to help them manage their energy consumption, reduce waste and cost. Some sophisticated CoP5 meters also accept pulses from the main gas and water meters enabling these utilities to be monitored and profiled alongside electricity.

So how much more do you have to pay for a CoP5 meter than a standard approved meter? Well surprisingly little. As these devices are now manufactured in their thousands a CoP5 meter will set you back around £300\*. This is the amount you would have paid for a basic sub meter with a pulse output 10 years ago and in view of the additional benefits and potential savings £300 is not a bad investment.

*CoP5 meters qualify for tax benefits under the Enhanced Capital Allowance scheme, ECA. For further information go to [www.eca.gov.uk](http://www.eca.gov.uk).*