

ESB NETWORKS REVENUE METER SIGNALS FOR CUSTOMER ENERGY MANAGEMENT SYSTEM (EMS)

The purpose of the customer signals is to provide the facility for a customer to link their electricity usage to their Energy Management System (EMS).

Summary of Process

The following sets out the process for obtaining customer signals from ESB Networks Metering:

1. Customer contacts their electricity supplier to request installation of customer signals for their third-party Energy Management System (EMS)
2. Supplier sends a market message (Market Message 030) to ESB Networks
3. Customer / contractor installs an IP54 signal interface enclosure with isolating links adjacent to the ESB Networks metering cabinet
4. ESB Networks installs a fuse terminal assembly within the metering cabinet and completes the wiring as far as the interface enclosure as per the Internal Customer Metering Signals Procedure
5. ESB installer advises customer/contractor of the signal values for input to the EMS

The Meter

On receipt of an application for customer signals ESB Networks shall determine if the meter and the associated equipment is EMS compatible. An Electronic MFM meter is required to provide the signals, if the Meter is not a compatible meter (Note: the Honeywell A1700 meter is currently the only compatible meter available) a new meter and infrastructure will be installed to facilitate the repeat signals and cost will be passed to the customer.

The Customer Interface Enclosure

To ensure a safe connection between the customer's assets and ESB Networks assets, an interface enclosure shall be mounted by the customer adjacent to the ESB Networks Meter cabinet. The enclosure shall be a minimum size of 150 x 100mm and shall be fitted with 6 isolating terminals. Two 20mm PG cable glands shall be provided, one for the ESB Networks cable and one for the customer EMS cable, see figure 1.

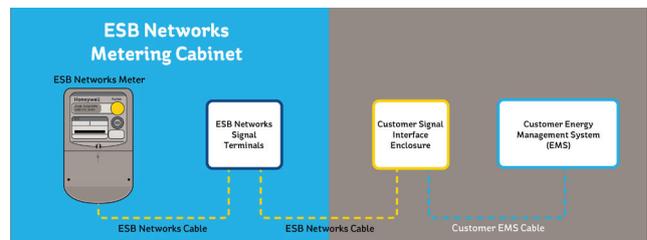


Figure 1: Customer signals equipment layout Signal Information

Signals are in the form of “volt free” contacts. The maximum voltage shall be 50V AC or 75V DC, all signal outputs will be fused at 100mA.

Up to four signal outputs are available for the A1700 meter, the standard configuration is: kwh, kvarh, 15min integration and day/night changeover.

Warning

The Meter is the property of ESB Networks. Therefore, no device shall be fixed, mounted or installed to the Meter or within the metering cabinet. It is an offence to interfere with the ESB Networks meter, equipment or remove seals.