

A SYSTEM AND METHOD FOR MONITORING RESIDENTIAL ENERGY CONSUMPTION

Abstract

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This invention relates to a residential energy consumption monitoring system and a method for monitoring energy consumption of a residential premise. The system comprises a smart distribution board (DB) and at least one smart socket outlet. The smart DB comprises a metering board having a number of metering channels, each metering
10 channel is connected to one of a miniature circuit breakers (MCBs) and configured to obtain frequency (Hz), current (A), and voltage (V), a DB processing unit configured to receive data from the metering device and, a direct current power supply for driving the processing unit. The smart socket outlet comprises a live inlet connected to one of the MCBs, a neutral inlet, metering device configured to obtain frequency (Hz), current (A),
15 and voltage (V) from the live and neutral inlets, an outlet processing unit configured to receive data from the metering device and transmit a data package comprising the data from the metering devices to the DB processing unit. The outlet processing unit is communicatively connected to the DB processing unit.

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Figure 1 to accompany the abstract