

ABSTRACT

**A METHOD FOR ACQUIRING DATA FROM AT LEAST ONE WIRELESS
SENSOR IN A NON-INTRUSIVE, TIME CONTROLLED AND ENERGY
EFFICIENT MANNERS AND SYSTEM THEREOF**

The present invention discloses a method for acquiring data from at least one wireless sensor comprising the steps of activating, by a wake up module, a wake up mode upon a preset time interval, wherein the wake up mode comprises the steps of
10 initialising, by an initialising module, the sensor device upon the activation of wake up mode; retrieving, by a retrieval module, data from the sensor device; calculating, by a calculation module, values of electrical parameters and associated measurements; switching, by a power supply module, on a power supply of a wireless module; establishing, by a wireless module, a communication link between the wireless
15 module and a gateway of a remote server; transmitting, by a transmission module, the calculated values to a remote server via the communication link; generating and transmitting, by an acknowledgement module, an acknowledgement request signal to the remote server via the communication link so as to check if the remote server receives the data; and activating, by a sleep module, a sleep mode upon receiving a
20 completion signal from the remote server, wherein the sleep mode comprises the step of switching, by the power supply module, off the power supply of the wireless module.

(Fig. 2)