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SUBJECT: THE INSTALLATION OF THE PHOTOVOLTAIC STREET LAMPS NEW SERIES.

This document shows how easy and quick the installation of a photovoltaic street lamp of the new series is.

We divided the installation in different stages to describe better the different processes.

STAGE 1: excavation and building of the plinth with the hole for the lamppost and the watertight case for batteries.



NOTE: the dimensions of the plinth are calculated on the coefficient of ground pressure, weight of the photovoltaic lamppost and windiness of the place. As it was set in the project the battery case has been inserted in a reinforced concrete structure.

STAGE 2: unload of the material and the lamppost. The following pre-assembled parts will be fixed together:

- structure and photovoltaic modules;
- linking structure and lamp head with electronic ballast;
- cabling.



STAGE 3: installation of the cabling equipped lamppost with the help of a crane.

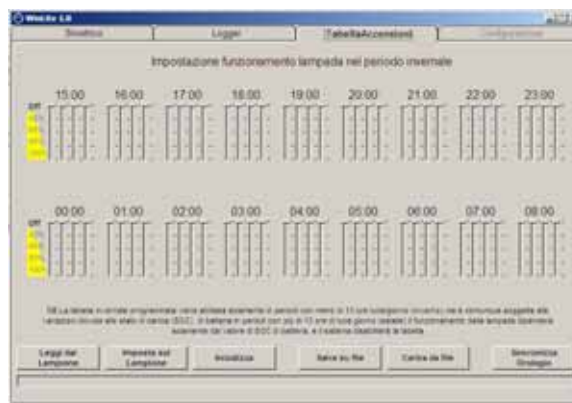
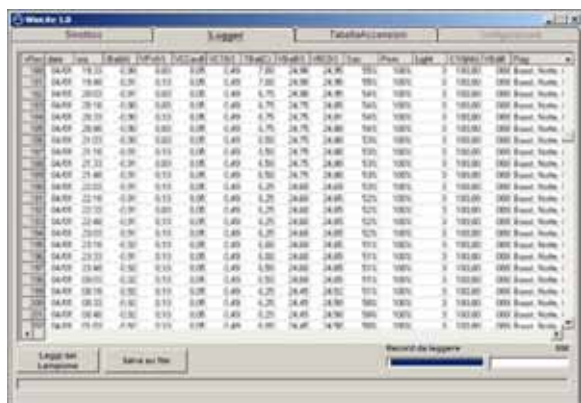
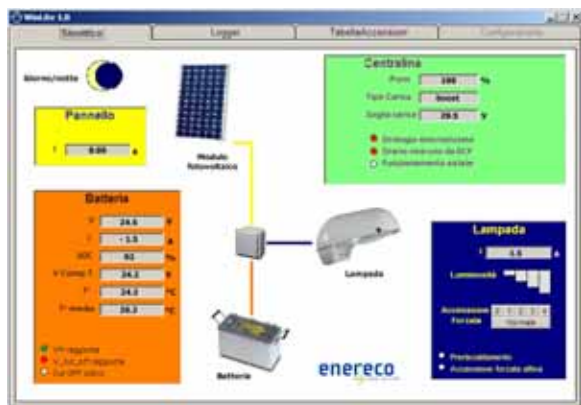


STAGE 4: insertion of the batteries in their specially provided case. Connection of the batteries to the electric cabling.



NOTE: During this stage the RS232 serial port will be placed in the apposite cavity of the lamppost. Moreover, the cabling will be protected by a proper cover.

The RS232 serial port allows to work with the DATALINK software through which it is possible to display the correct functioning of the lamp and to put into operation the night lighting timetable.



PHOTOVOLTAIC STREET LAMP: DAY AND NIGHT**PARTICULAR APPLICATIONS**

Thanks to the innovatory devices of the new series of photovoltaic lamps it is possible to engineer also **HIGH PRESSURE SODIUM VAPOUR LAMPS** and **HALIDE VAPOUR LAMPS** that can reach a power of **70W**.

These systems, however, need much more energy, this means that they usually require larger photovoltaic panels.

For this reason we created a hybrid system to be used in particular cases: photovoltaic plus wind power.

The hybrid system reduces the initial cost as it allows the use of smaller photovoltaic panels

