Solar pumping station

NEW

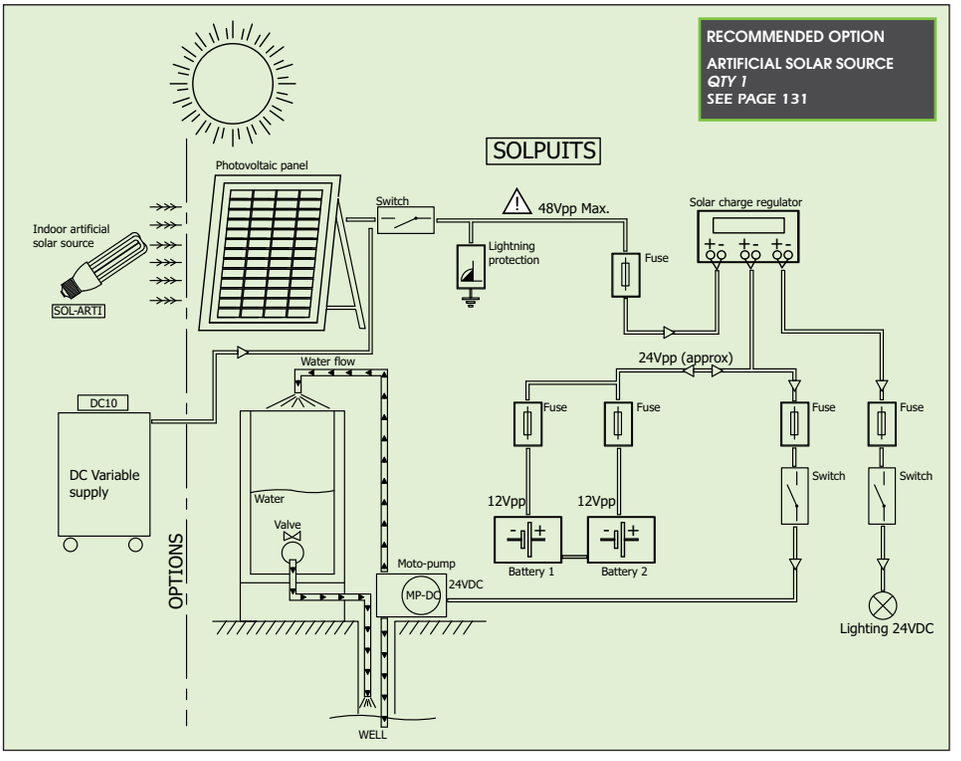
SOLPUITS is a fully self-contained solar pumping station with electrical energy. This system lets students understand and analyse its operation and cable solar electrical components.

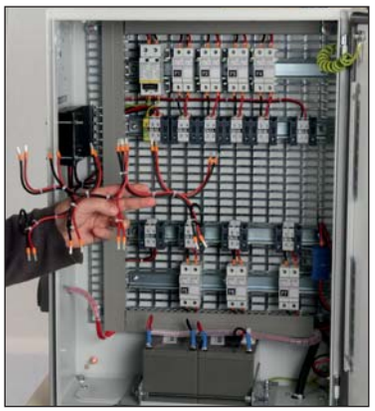
COMPRISES

- 1 photovoltaic solar panel 200Wc mounted on a robust frame that tilts from 5° to 70°. Output 47VDC-4.2A on 2 photovoltaic terminals. 1 30-m link cable.
- 1 100-l tank simulates the underground water source.
- 1 60-l transparent container acts as water reserve. A tap simulates user consumption and returns water to the tank.
- 1 sealed motor pump 140W- 24DVC-6A. 13l/min capable of pumping dry. It takes water from the tank and fills the reserve water container.
- 2 12V/6Ah batteries supply the pumping station when sunlight is absent.
- 1 24VDC-20A regulator controls battery charging. One 2-button display accessible outside the cabinet enables configuration and viewing of the currents of the solar panel, the battery charge and the lamp and the battery voltage.
- 1 electrical cabinet includes the cabling of all the solar components on connection terminals. A lightning arrester protects the installation and each component is protected by fused circuit-breaker type gPV. The cabling is fully marked and students can easily remove the original strand to do their cabling. Students can also take voltage and current readings. A main switch isolates the solar panel from the electrical cabinet.
- A switched 24VDC lamp lights the area.

A wheeled frame for passing under doors.
SOLPUITS requires no direct water connection. Once the 80-l tank is filled with water, the system is totally self-contained.
Supplied cabled with detailed instructions and complete practical assignments.
Dimensions: 750 x 670 x 1980mm

ref. SOLPUITS





Simply remove the strand before asking students to do the cabling.