

Energies Renovables

**SolarMontroi**

Fotovoltaica – Tèrmica - Biomassa

DIRECT SOLAR PUMPING  
Albert March



Erasmus+

**DIRECT SOLAR PUMPING**  
Natural synchronization

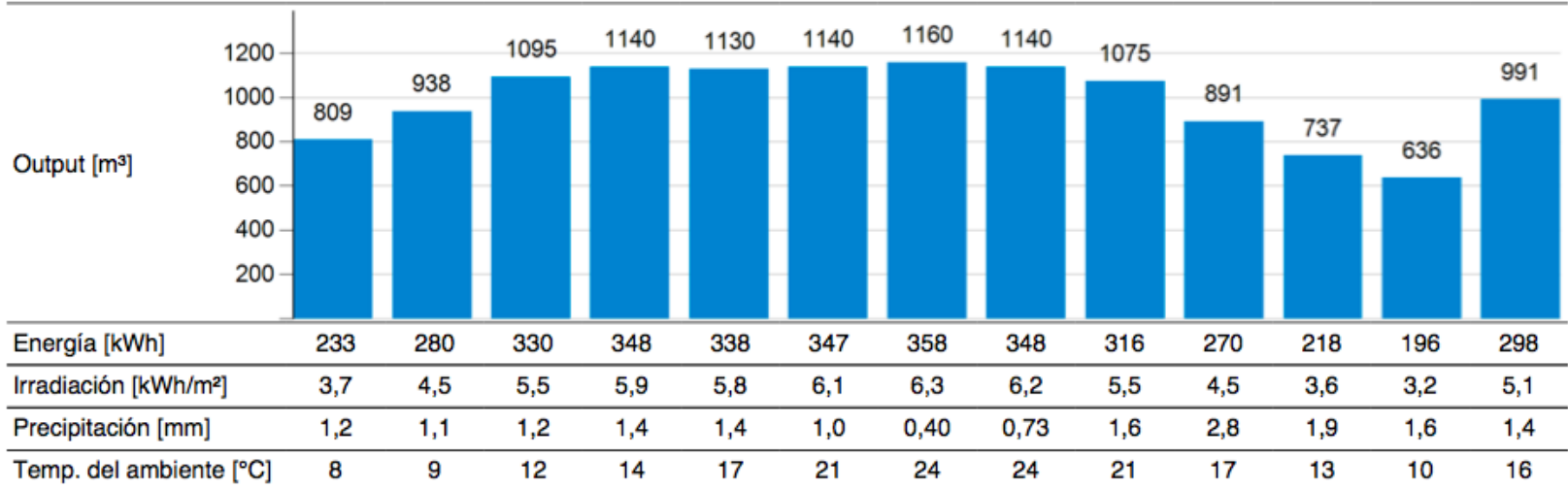
**Ajuste de SunSwitch en PumpScanner**

**min. 250 W/m<sup>2</sup>**

**Rendimiento diario en mes promedio**

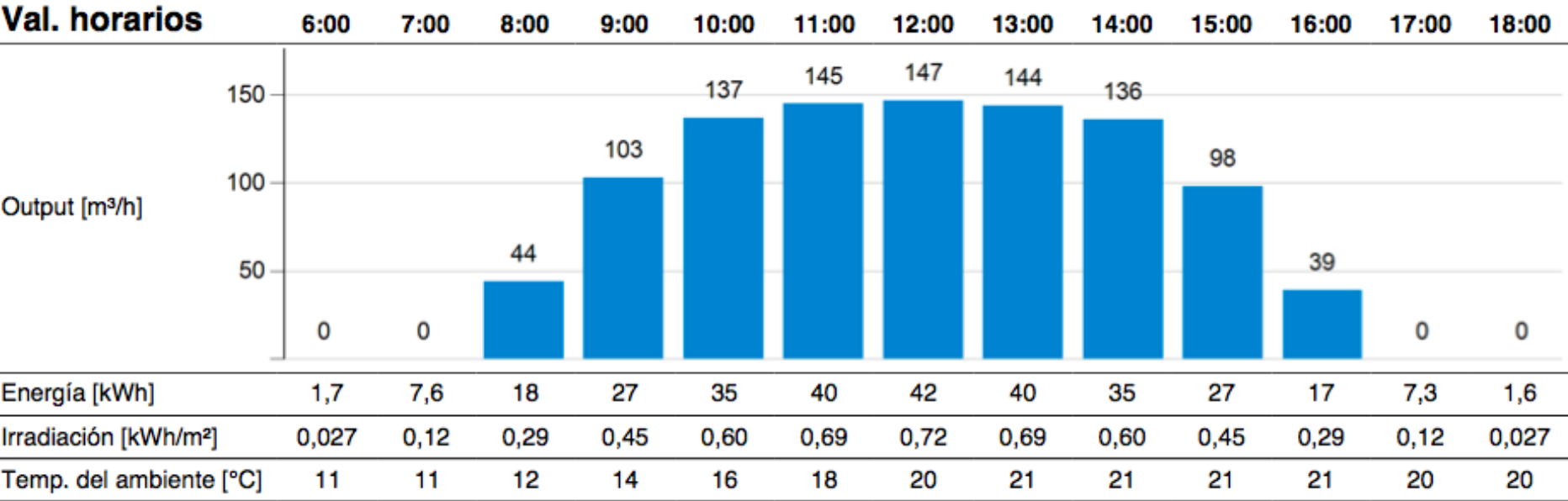
**991 m<sup>3</sup>**

**Val. diarios**



- The Solar Direct pumping systems synchronized, naturally, the time of greatest water demands from the water the crops with the period of major photovoltaic production.

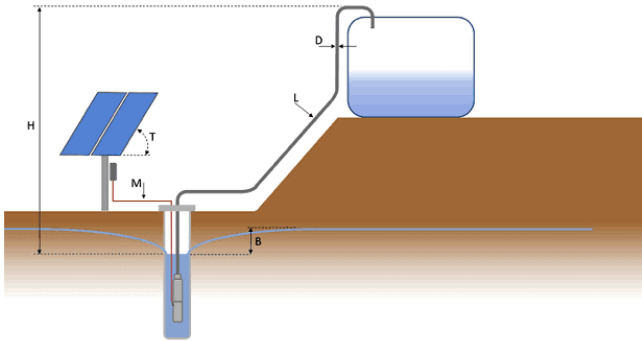
**DIRECT SOLAR PUMPING**  
The daily production bell shape



- The sun is responsible for starting the pump early in the day and keep it running until the sunset

## DIRECT SOLAR PUMPING

The direct use of solar resource



Photovoltaic modules



Variator

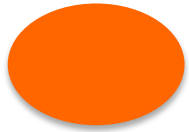


Pump



Consumption

- The direct use of solar resource significantly simplifies installation by not using any storage system



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**DIRECT SOLAR PUMPING**  
The floating platform

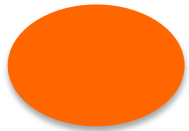


**DIRECT SOLAR PUMPING**  
The floating platform



Advantages of floating systems :

- Do not occupy crop surface
- Installable on reservoirs.
- Modular and expandable.
- Reduce the solar irradiation on the water surface



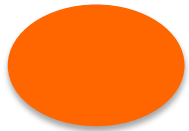
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**DIRECT SOLAR PUMPING**  
**Real (La Ribera Alta)**





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Canalization  
Sogrony ravine



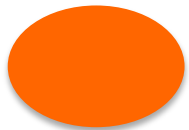
Canalization Magre river



To the surplus reservoir  
at a higher level

to ring of  
irrigators  
community





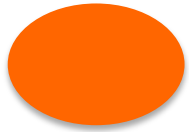
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DIRECT SOLAR PUMPING  
Directly to irrigation ring





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# **SolarMontroi**

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Location: Los Isidros (Requena)

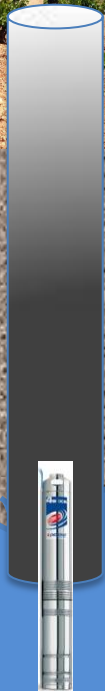
Vine irrigation without accumulation

Pumping depth: 75 meters.

Pump: Lorentz PS 4.000

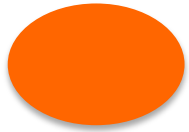
Photovoltaic : 7.000 Wp (28 modules of 250 Wp)

Daily flow: 70 m<sup>3</sup>/día



DIRECT SOLAR RE-PUMPING





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Location: Torís.

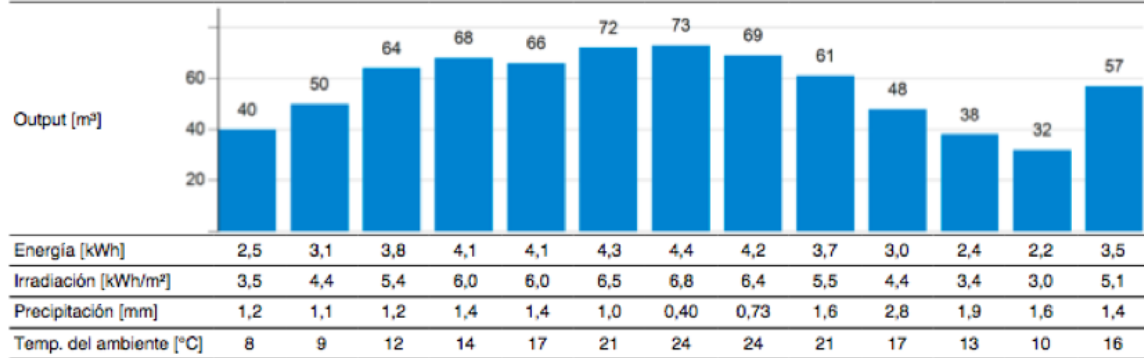
Citrus irrigation.

Re-pumping.

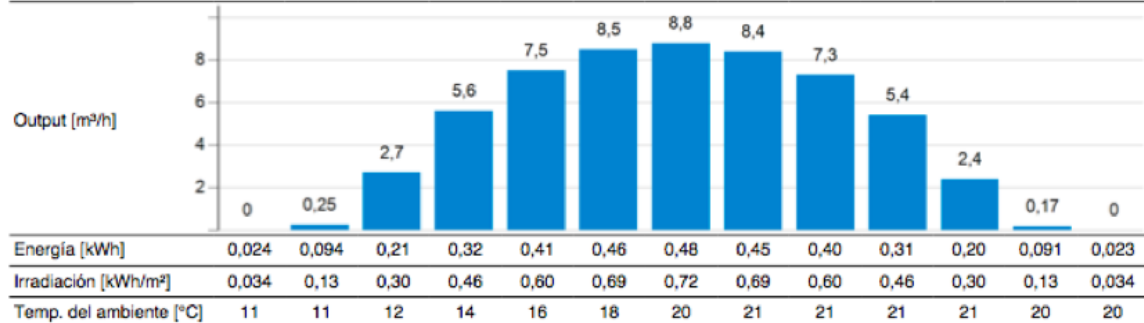
Pump: Lotentz PS 1.800

Installed power: 750 Wp (3 modules of 250 Wp)

### Val. diarios



### Val. horarios





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[www.solarmontroi.es](http://www.solarmontroi.es)