TATA BP SOLAR INDIA LIMITED

PRODUCT SPECIFICATION

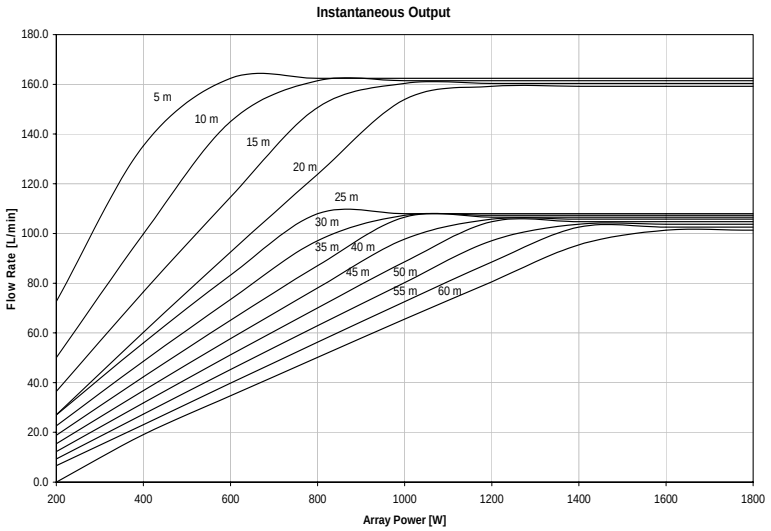
S U B M E R S I B L E P U M P I N G S Y S T E M – 1 8 0 0 W p

SYSTEM

1	PV Array rating (Wp) at STC	1800Watts
2	No. of Modules / System	24 Nos. of 75 Wp
3	PV arraymounting arrangement [Fixed / Tracking]	Tracking manual - 3 Positions [Morning / afternoon / Evening] Seasonal Tracking - 3 positions [Summer / winter / rainy]
4	Type of Pump and capacity	Submersible, 1800Watts

PUMP & MOTOR

- PUMP-MOTOR TYPE — Helical rotor Brushless, sensorless, permanent magnet, DC, submersible motor coupling to the Subrotor submersible pump
- CASING & SHAFT — Stainless Steel



Supply voltage of Pump-motor

Flexible power range, the motor can be supplied with DC voltage of 30 to 165 VDC

Maximum Power Point Tracking (MPPT)

Microprocessor controlled maximum power point tracking continuously changes the array voltage and monitors the input power level thus following changes in the maximum power point of the array. This technology extracts the maximum available power form the solar modules. System is operated with 8 Solar panels of 12V75Wp in series with three strings in parallel giving best result with 1800Wp of array. Note the modules are mounted 12nos per structure and supplied in two structures.

Environmental

Storage Temperature : -10 to 60degC
Operating Temperature : 0 to 50degC
IP Rating : IP66
Humidity : 95% Max.

Protections:

1. Dry-running protection

The pump is protected against dry running in order to prevent damage to the pump. The dry-running protection is activated by a water level electrode placed on the motor cable.

2. Overvoltage and undervoltage protection

In areas with high lightning intensity, external lightning protection is recommended.

3. Overload protection

4. Overtemperature protection: When the temperature rises the motor is automatically cut out. When the temperature has dropped to normal range, the motor is automatically cut in again.