**Overview**

First of its kind indigenously developed product by Analogics to make agriculture sector in India more self-sustained. It is the latest innovative technology product with user-friendly features of Solar Water Pump Controller cum Utility Power Generator for the benefit of the farmer. It consists of Solar Water Pump Controller and an added feature to export excess solar power to the utility grid.

**Features**

* 3-Phase Variable Frequency Drive (VFD) to drive the AC submersible or surface mount pumps (ranging from 3 to 7.5HP)
* Can be switched from Pump driver to Grid Tied Inverter (manual or automatic) or vice-versa
* Ensures total protection for pumps against dry run, short circuit, over voltage and under voltage
* Remote monitoring and ON/OFF control through mobile

**Benefits**

* Reduces the dependency on grid supply
* Additional source of income to farmer
* Maximum revenue can be generated by exporting solar power to grid at noon, when solar panels happen to output the most electrical power
* Added water pump protection circuitry results in longer pump life

**Technical Specifications**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Processor | CPU | 32 bit DSP Controller |
| Speed | 200MHz |
| C:\Users\Aamani\Downloads\3-Memory.png | Memory | RAM | 164KB |
| Flash | 1MB |
| C:\Users\Aamani\Downloads\4-CommunicationPort.png | Communication Ports | Port | RS 485 |
| C:\Users\Aamani\Downloads\7-DisplayKeypad.png | Display & Keypad | Display type & size | 2x16 LCD display |
| C:\Users\Aamani\Downloads\Input.png | DC Input (From Array) | Max. Input Power | 5500Wp |
| Max. DC Voltage | 800V |
| MPPT Voltage Range | 300-750V DC |
| C:\Users\Aamani\Downloads\Output.png | Output (Grid Tied Inverter Mode) | AC Nominal Power | 5kW |
| Nominal AC Voltage/Current/Freq. | 400V AC, 3-Phase/ 10A / 50Hz |
| AC Voltage Range | 320 to 470V |
| Max. Efficiency | >98% |
| Max. THD | <3% at rated power |
| C:\Users\Aamani\Downloads\Output.png | Output (VFD Mode) | AC Nominal Power | 5 HP |
| Nominal AC Voltage/Current/Freq. | 400V AC, 3-Phase/ 10A / 50Hz |
| AC Voltage Range | 100 to 440V |
| Max. Efficiency | >98% |
| Max. THD | <3% at rated power |
| C:\Users\Aamani\Downloads\8-Optional.png | Other Peripherals | LCD | Multi-function display |
| Optional | WiFi, GPRS |
| Protections | Anti Islanding, Over Load, Short Circuit |
| Enclosure Protection/ Type of cooling | IP 65/ Natural |
| C:\Users\Aamani\Downloads\9-Dimensions.png | Dimensions | L x W x D in mm | 500 x 400 x 210 |
| C:\Users\Aamani\Downloads\10-Operating.png | Operating Conditions | Operating Temperature | -10°C to +55°C |
| Relative Humidity | 5-95% (Non-condensing) |