

Solar DC Pump Controller Technical Datasheet



| Model | | HBDC750 | | | HBDC1500 | |
|---------------------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------------------------|---------------------------------------------|--|
| Compatible Motor Types | | 2,3,4,5,6,7,8,9,10 Pole Pairs BLDC Motor | | | 2,3,4,5,6,7,8,9,10 Pole Pairs BLDC Motor | |
| Compatible DC PUMP Voltage | | Compatible with 24V, 36V, 48V, 72V DC Pump | | | Compatible with 96V,110V DC Pump | |
| Solar Panel DC Input | Max Voc Voltage | 150V | | | 240V | |
| | Min Vmp Voltage | 20V | | | 70V | |
| | Recommend MPPT Vmp Voltage | > Motor Voltage | | | > Motor Voltage | |
| | Max MPPT Efficiency | 98% | | | 98% | |
| | Max Input Current | 18 A | | | 18 A | |
| | Number Of Strings MC4 | 1 (+,-) | | | 1 (+,-) | |
| | Note | Automatic MPPT Function to Identify the Voc and Vmp of Solar Panel,without programming | | | | |
| Battery Input | Voltage | 24 / 36 / 48 /72 V Depend on the Pump Voltage | | | 96 /110 V Depend on the Pump Voltage | |
| | Max Input Current | 18A | | | 18 A | |
| | Battery Protection Voltage MIN, RECOVERY,MAX | 21.3V 23V 30V @ 24V | 32.5V 35V 40V @ 36V | 42.6V 46V 52V @ 48V | 86.4V 92V 108.8V @96V | |
| DC Output Parameters | Max Adapted DC Pump Horse Power | 1 HP | | | 2HP | |
| | Max Adapted DC Pump Power | 750W | | | 1500W | |
| | Drive Mode | 3Phase Variable Speed Drive | | | 3Phase Variable Speed Drive | |
| | Output Voltage | 24 / 36 / 48V/ 72V | | | 96V/ 110V | |
| | Max Output Current | 16A | | | 16A | |
| Water level Sensor(well / tank) | | Yes | | | Yes | |
| Display | | LCD screen. Photovoltaic voltage, current, output voltage, current, speed, frequency, internal temperature. | | | | |
| Waterproof | | IP65 | | | | |
| Noise | | Low Noise | | | | |
| Cooling Method | | Natural cooling | | | Force Cooling by Fan (IP67) | |
| Protection | | Solar DC Input Over-Voltage Solar DC Input Anti-reverse Battery Low Voltage/Over Voltage Protection Output Phase lost Output Short Circuit Output Over Current Input Over Load Over Temperature Water Over Flow of Tank(By Sensor) Well Water Empty(By Sensor) | | | | |
| WIFI/4G Remote Control | | Optional | | | | |
| Working Time Control | | Settable working time, Remote Control via Wi-Fi/4G Module | | | | |
| Operating Environment | Operating environment temperature | -10 to 60°C, Above 60°C need to derate load | | | | |
| | Max Humidity | 95%RH | | | | |
| | Using altitude | < 3000m, Above 3000m need to derate load | | | | |
| | Others | Prohibiting the installation location: direct sunlight, thick dust, corrosive gas or oil mist, flammable gas, liquid.etc | | | | |
| Package | Size | 25*24*16CM | | | 32*25*16CM | |
| | Weight | 3KG | | | 3.5KG | |