

Solar Photo Voltaic Water Pump

Day wise reading of different parameters

Day - 1 (13-03-2018)

Sl. No	Name of the observed Parameter	Value
1	Photo voltaic voltage (V)	550
2	Photo voltaic current (A)	1.52
3	Photo voltaic wattage (W)	830
4	AC voltage (V)	234
5	AC frequency (Hz)	28.2
6	Temperature (°C)	35.2
7	Energy generated per day (KWH)	0.18
8	Energy generated till today (KWH)	618.2
9	Total working hours system (Hrs)	626.1

Solar Photo Voltaic Water Pump

Day wise reading of different parameters

Day – 1 (14-03-2018)

Sl. No	Name of the observed Parameter	Value
1	Photo voltaic voltage (V)	563
2	Photo voltaic current (A)	1.68
3	Photo voltaic wattage (W)	946
4	AC voltage (V)	236
5	AC frequency (Hz)	28.29
6	Temperature (°C)	32
7	Energy generated per day (KWH)	0.187
8	Energy generated till today (KWH)	619.3
9	Total working hours system (Hrs)	636.2

Solar Photo Voltaic Water Pump

Day wise reading of different parameters

Day – 1 (15-03-2018)

Sl. No	Name of the observed Parameter	Value
1	Photo voltaic voltage (V)	553
2	Photo voltaic current (A)	1.53
3	Photo voltaic wattage (W)	825
4	AC voltage (V)	235
5	AC frequency (Hz)	28.41
6	Temperature (°C)	39.4
7	Energy generated per day (KWH)	0.16
8	Energy generated till today (KWH)	620.76

9	Total working hours system (Hrs)	648.25
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Solar Photo Voltaic Water Pump Day wise reading of different parameters

Day – 1 (16-03-2018)

Sl. No	Name of the observed Parameter	Value
1	Photo voltaic voltage (V)	571
2	Photo voltaic current (A)	1.82
3	Photo voltaic wattage (W)	1027
4	AC voltage (V)	240
5	AC frequency (Hz)	28.49
6	Temperature (°C)	40.5
7	Energy generated per day (KWH)	0.91
8	Energy generated till today (KWH)	622.68

9	Total working hours system (Hrs)	651.57
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Solar Photo Voltaic Water Pump Comprehensive table for parameters in all days

13-03-2018 to 16-03-2018

Sl. No	Name of the observed Parameter	13-03-2018	14-03-2018	15-03-2018	16-03-2018
1	Photo voltaic voltage (V)	550	563	553	571
2	Photo voltaic current (A)	1.52	1.68	1.53	1.82
3	Photo voltaic wattage (W)	830	946	825	1027
4	AC voltage (V)	234	236	235	240
5	AC frequency (Hz)	28.2	28.29	28.41	28.49
6	Temperature (°C)	35.2	32	39.4	40.5
7	Energy generated per day (KWH)	0.18	0.187	0.16	0.91

8	Energy generated till today (KWH)	618.2	619.3	620.76	622.68
9	Total working hours system (Hrs)	626.1	636.2	648.25	651.57

Study of the power efficiency
and photo voltaic power efficiency of
the PV system used for the Solar Water Pump

Sl. No	Date	Value of the Wattage	Efficiency $\eta = P/P_o$	Efficiency factor	Efficiency Percentage
1	Rated PV Wattage	Po = 1041 W			
2	Day - 1 13-03-2018	830	830/1041	0.797	79.7
3	Day - 2 14-03-2018	946	946/1041	0.908	90.8
4	Day - 3 15-03-2018	825	825/1041	0.792	79.2

5	Day - 4 16-03-2018	1027	1027/1041	0.986	98.6
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