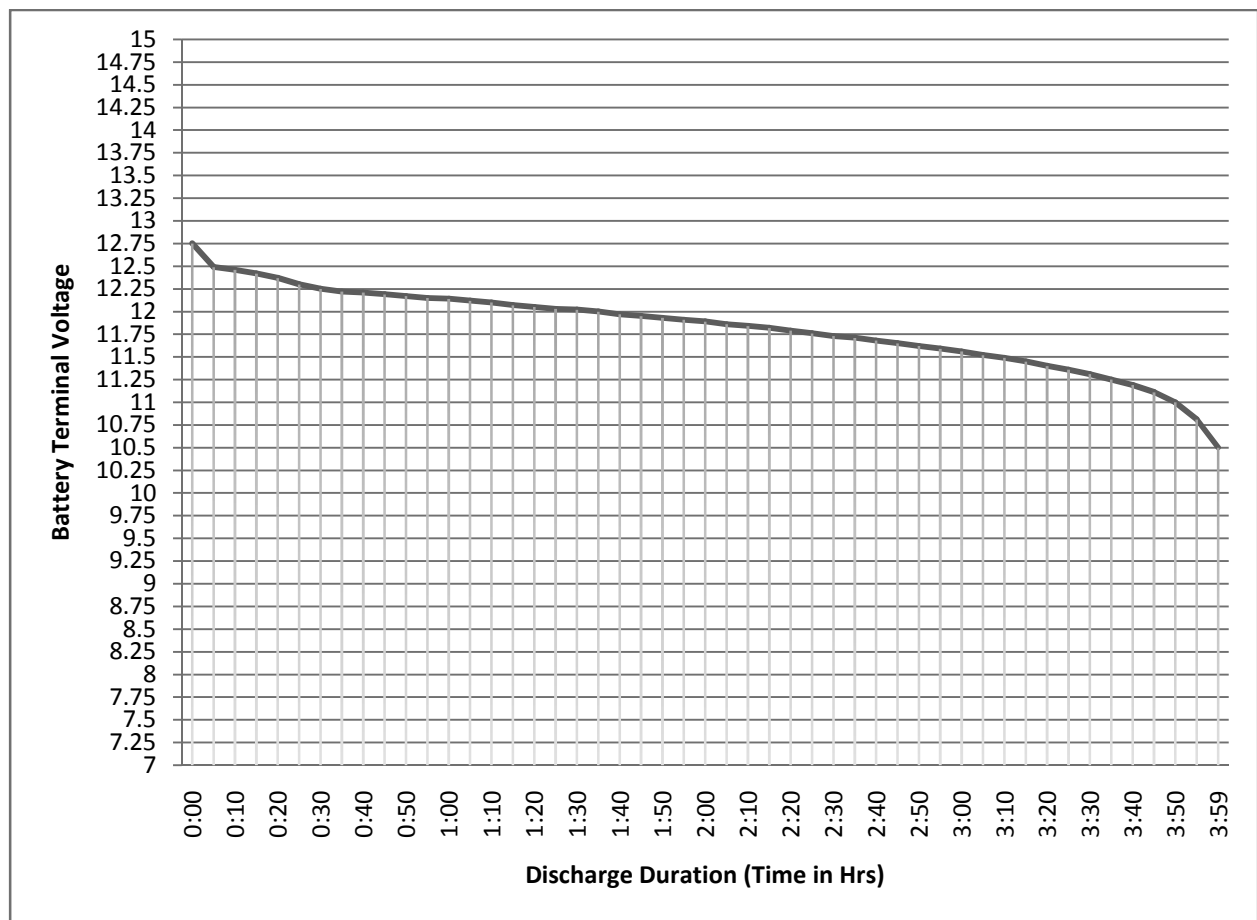


### **Test Parameters and Battery Information Table**

Battery Type	Sealed Maintenance Free Lead Acid Battery Brand : SUNCA
Battery Rated Capacity	4.5 Ah, two 6V Battery in series = 12 V nominal
Battery History	Purchased about 6 months back (September, 2015) , about 10 partial discharges were done during this period, Battery was charged few times with a 40 Wp Solar Panel and a Charge Controller which has Panel Disconnect voltage 14.4 volts and Battery Reconnect voltage of 13.3 volts. Battery has been Equalized up to 15.5 volts few times
Amb. Temp (before Test)	21 degree C
Battery Terminal Voltage (before Test)	12.97 volts ( 6.48 V + 6.49 V )
Discharge C –rate	C/5 ( 5 hrs test )
Discharged Current Set Value : Measured Value (a) Measured Value (b)	900 mA (by user before starting test) 880 mA = 0.88 A (from Multimeter) 920 mA = 0.92 A (from Current Sensor)
Specific Gravity	Not measured due to Sealed Battery Type
Battery Test End Condition	Reached 10.5 volts (1.75 per cell) before 5 hrs
Battery Terminal Voltage a. Just after Test (when load is released) b. After 30 minutes c. After 1 Hrs	11.26 Volts ( 5.54 V + 5.72 V )  11.71 Volts ( 5.84 V + 5.87 V ) 11.78 Volts ( 5.87 V + 5.91 V )
Amb. Temp ( After Test )	21.0 degree C

Manual Data Records During Test		TEST Data Copied from EEPROM			
Time Hrs	Terminal Voltage	Time Hrs	Terminal Voltage	Time Hrs	Terminal Voltage
00:01	12.54	00:00	12.75	02:00	11.89
00:05	12.49	00:05	12.49	02:05	11.86
00:10	12.46	00:10	12.46	02:10	11.84
00:15	12.42	00:15	12.42	02:15	11.82
00:20	12.37	00:20	12.37	02:20	11.79
00:25	12.31	00:25	12.30	02:25	11.76
00:30	12.25	00:30	12.25	02:30	11.73
00:35	12.22	00:35	12.22	02:35	11.71
00:40	12.20	00:40	12.21	02:40	11.68
00:45	12.19	00:45	12.19	02:45	11.65
00:50	12.17	00:50	12.17	02:50	11.62
00:55	12.15	00:55	12.15	02:55	11.59
01:22	12.05	01:00	12.14	03:00	11.56
01:30	12.02	01:05	12.12	03:05	11.52
01:36	11.99	01:10	12.10	03:10	11.49
01:45	11.95	01:15	12.07	03:15	11.45
02:07	11.85	01:20	12.05	03:20	11.40
02:23	11.77	01:25	12.03	03:25	11.36
02:48	11.63	01:30	12.02	03:30	11.31
02:51	11.61	01:35	12.00	03:35	11.25
03:15	11.44	01:40	11.97	03:40	11.19
03:30	11.31	01:45	11.95	03:45	11.11
03:45	11.11	01:50	11.93	03:50	11.00
03:59	10.50	01:55	11.91	03:55	10.81
	STOPPED			03:59	10.50



### Calculation:

Battery Capacity (minimum) = 3.98hrs x 0.9 A = 3.585 Ah

### Observation :