Technical Spec. of 2 W Solar LED Lantern		
S.No		
	Electrical Parameters	
1	Solar panel	10 Wp
2	Solar Panel Voltage Conf	VOC:15 V,Vmp-12v
3	Solar Panel Current	Imp-0.83 amp,Isc:0.95 Amp
4	Input Voltage	12 Volt Battery
5	Battery Capacity	3x3.2vx1500mAh Lifepo4 with BMS System
6	Device Management	Multiple Light emitting devices shall be used & shall be in series -parallel cluster
7	Series Device	These Devices shall have a shunt
8	Driver	Current regulator for each cluster
9	Wattage of Light	2 watts
10	Driver Efficiency	>90%
11	Battery Low voltage Cut off setting	80% DOD
12	Battery high voltage cut-off voltage	10.6 +/- 0.3 Volt
13	Load reconnecting battery voltage	9.6Volt
14	Idle current consumption	<1 mA
15	Dimmable option	Two stage dimming 100%,60%,40% by push button
	Optical Management	
1	LED Make	Osram/Cree/ Nichia or Equivalent
2	View angle	>120°
3	Colour Temperature	5000K-6500K
4	LED life with L70 criteria	>60,000 operating hours
5	Optical efficiency	Optical efficiency
	Thermal Management	
1	Heat Sink	Aluminium grade>6000
2	Jn.Temperature of LED at 25 °C	≤ 60 °C
3	Heat Sink temperature rise above ambient	≤20 °C
	General Parameters	
1	Battery back up	6 Hours
2	Recharging time one day use	5 hrs.
3	Charging Current & Current limiting device	Yes, Auto Boost Trickle Mode
4	Battery Charging circuit	Yes, Automatic Charger
5	Reverse Polarity Protection	Yes
6	Short Circuit Protection	Yes
7	Open Circuit	Yes with Fuse
8	Life of Battery	Min.1500 cycle at full discharge
9	Maintenance Cost	NIL
10	Replacement Cost	NIL, Except Battery at Specified Cycles
11	Over Voltage Protection	Yes
12	Surge Protection	Yes
13	Environmental Protection	IP 65
	Special Features	
1	LED efficiency at 30 °C at 1 Watt	>100 Lumens
2	Deep discharge Indicator	Red LED
3	Charging Indicator	Green LED
4	Battery charger circuit	Automatic with Auto-Boost and Trickle Charging mode
5	Low battery Indication with memory-Turn On	After 60% Discharge Level
6	Turn Off	After 60% Recharge Level
7	IP Clause	IP 65