Power Backup of UHF Radio Set (Lead Acid Battery, Solar Panel, Hybrid Inverter, Power Supply with DC Cable)

1. Specification of Power Supply

S.N.	Parameter	Technical Specification	Remarks
1	Features	Overload & short-circuit protection with Current Foldback at approximately 14 Amp	
		Over Temperature Protection; variable speed fan automatically controlled for quiet operation	
		Switchable Meter allows monitoring of voltage & current	
		Access to front panel DC terminals; standard 12A terminals	
		Circuitry yields high RFI protection from external sources	
		AC line filter for EMI protection	
		Power Indicator & Overload Indicator	
2	Power Supply Requirements	Accepts 120 - 220 VAC ± 20% 50-60 cps	
3	Output Voltage	1 to 15 Volts Variable	
4	Current	12 Amps	
5	Type	Regulated Linear	
6	Variable voltage control	1-15 VDC	

2. Specification of 12V Battery (100AH)

S.N	Parameter	Technical Specification	Remarks
1	Type	Tubular, Flooded Cell type battery	
2	Deep Cycle tubular plate	Lead Acid	
3	Battery Capacity	12 V, minimum 100AH	
4	Charging current and discharging current rated	C10	
5	Features	Unique tubular positive plate design for long life	
		Suitable for frequent power-cuts	
		Superior active material and special alloy used for low maintenance of the battery	
6	Plate design	Special additives to get quick recovery from deep discharge	
7	Float guide vent plug	Electrolyte level indication	
8	Long battery life	Up to 3 years under proper use; Date of manufacture should not be older than six months.	
9	Quality	ISO or FCC or IEC or equivalent standard	
10	Warranty	Minimum 2 Years/provided by OEM whichever is greater	
11	DC Wire	Minimum 20 meters DC Cable and connectors required for installation of power system	

3. Specification of Solar Panel

S.N	Parameter	Technical Specification	Remarks
1	Maximum Power	100 Wp	
2	Cell Type	Monocrystalline	
3	Voltage at Maximum Power	Minimum 15Volt	
4	Current at Maximum Power	Minimum 5 A	
5	Cell Conversion Efficiency	Minimum 17%	
6	Certifications	IEC EN 61215, IEC EN 61730, IEC 61730-2, CE confirmity, UL 1703 2002/03/15 Ed:3 Rev 2008/04/08, UL Safety edition 2001/01/01	
		The panel must be tested and passed by Renewable Energy Test Station	
7	DC Wire	minimum 20 meter DC wire with connector	
8	Quality	ISO 9001 or equivalent standard	
9	Warranty	25 years of limited warranty of 80% power output,10 years of warranty on workmanship	

4. Specification of Inverter 1.5 KVA (Hybrid)

S.N	Parameter	Technical Specification	Remarks
1	Features	Pure Sine Wave Inverter, Built-in MPPT solar charge controller, Configurable AC/Solar input priority via LCD setting, Overload and short circuit protection, Smart battery charger design for optimized battery performance.	
2	Rated Power	Minimum 1500VA	
3	Power factor	Minimum 0.8	
Input			
4	Voltage	220/230/240VAC	
5	Frequency Range	50Hz/ 60Hz (Auto sensing)	
Output			
6	AC Voltage Regulation (Batt. Mode)	220/230/240VAC ± 5%	
7	Efficiency (Peak)	minimum 90%	
8	Waveform	Pure Sine Wave	
Battery			
9	Battery Voltage	12VDC	
10	Floating Charge Voltage	13.5VDC	
11	Overcharge Protection	16VDC	
Solar Charger and AC Charger			
12	Maximum Photovoltaic Array Power	600 W	
13	MPPT Range @ Operating Voltage	15VDC ~ 80VDC	
14	Maximum Photovoltaic Array Open Circuit Voltage	50VDC	
15	Maximum Solar Charge Current	50A	
16	Maximum AC Charge Current	20A	
17	Operating Temperature	-20°C to 55°C	
18	Warranty	Minimum 2 years/ provided by OEM whichever is greater	
19	Standard	ISO or FCC or IEC or NS or IS or equivalent Standard	