TECHNICAL SPECIFICATIONS OF SOLAR POWER PLANT

0.5 kW SPV Power Plant:

Sr. No.	Particulars	Specifications
		0.5 kW SPV Plant
1	Solar PV Modules	Crystalline Silicon
	a Capacity	500 W
	b Make	Any MNRE approved OR IEC 61215 (revised)
	c Module	74/100/180/200/220/250 Wp
	d No. of SPV Modules	Depends on Module wattage
2	Module Mounting Structure	MS hot dip galvanized with thickness of galvanization in between 80 to 120 micron as per the site condition.
3	Power Conditioning Unit	1 No.
	Inverter	625 VA (As per IEC 61683, IEC 60068-2)
	Charge Controller	As per the requirement (IEC 62093, IEC 60068-2)
4	Battery(Lead Acid, tubular positive plate flooded electrolyte or Gel / VRLA Type) (2 Volt, 300 Ah battery must be used)	300Ah / 24 V
5	Cabling	Min. 20 m
6	Monitoring, Control & protection device	1 Set
7	Metering at generation side	1 No. DC Watt-hour meter with USB port facility.
8	Metering at consumption side	1 No. AC Energy Meter with USB port facility.
9	Spares	Set of required fuses, screws & terminals etc as required.
10	Junction Boxes/Enclosures	IP 65 (for outdoor)/IP 21 (for indoor) IEC 62208
11	GI Pipe Earthing System conforming	As per IS:3043 – 1966
12	Lightning & Over Voltage Protection	System conforming provisions of IS:3070

Note:- Above 20 m length, the wiring may be charged extra as per the prevailing practice.

1 kW SPV Power Plant:

Sr. No.	Particulars	Specifications
		1 kW SPV Plant
1	Solar PV Modules	Crystalline Silicon
	a Capacity	1000 W
	b Make	Any MNRE approved OR IEC 61215 (revised)
	c Module	74/100/180/200/220/250/280Wp
	d No. of SPV Modules	Depends on Module wattage
2	Module Mounting Structure	MS hot dip galvanized with thickness of galvanization in between 80 to 120 micron as per the site condition.
3	Power Conditioning Unit	1 No.
	Inverter	1.25 kVA (As per IEC 61683, IEC 60068-2)
	Charge Controller	As per the requirement (IEC 62093, IEC 60068-2)
4	Battery(Lead Acid, tubular positive plate flooded electrolyte or Gel / VRLA Type) (2 Volt, 600 Ah battery must be used)	600Ah / 24 V
5	Cabling	Min. 20 m
6	Monitoring, Control & protection device	1 Set
7	Metering at generation side	1 No. DC Watt-hour meter with USB port facility.
8	Metering at consumption side	1 No. AC Energy Meter with USB port facility.
9	Spares	Set of required fuses, screws & terminals etc as required.
10	Junction Boxes/Enclosures	IP 65 (for outdoor)/IP 21 (for indoor) IEC 62208
11	GI Pipe Earthing System conforming	As per IS:3043 – 1966
12	Lightning & Over Voltage Protection	System conforming provisions of IS:3070

Note:- Above 20 m length, the wiring may be charged extra as per the prevailing practice.

2 kW SPV Power Plant:

Sr. No.	Particulars		Specifications
			2 kW SPV Plant
1	Solar PV Modules		Crystalline Silicon
	a	Capacity	2000 W
	b	Make	Any MNRE approved OR IEC 61215 (revised)
	c	Module	74/100/180/200/220/250/280Wp
	d	No. of SPV Modules	Depends on Module wattage
2	Module Mounting Structure		MS hot dip galvanized with thickness of galvanization in between 80 to 120 micron as per the site condition.
3	Power Conditioning Unit		1 No.
	Inverter		2.5 kVA (As per IEC 61683, IEC 60068-2)
	Charge Controller		As per the requirement (IEC 62093, IEC 60068-2)
4	Battery(Lead Acid, tubular positive plate flooded electrolyte or Gel / VRLA Type) (2 Volt, 975 Ah battery must be used)		975 Ah / 24 V
5	Cabling		Min. 20 m
6	Monitoring, Control & protection device		1 Set
7	Metering at generation side		1 No. DC Watt-hour meter with USB port facility.
8	Metering at consumption side		1 No. AC Energy Meter with USB port facility.
9	Spares		Set of required fuses, screws & terminals etc as required.
10	Junction Boxes/Enclosures		IP 65 (for outdoor)/IP 21 (for indoor) IEC 62208
11	GI Pipe Earthing System conforming		As per IS:3043 – 1966
12	Lightning & Over Voltage Protection		System conforming provisions of IS:3070

Note:- Above 20 m length, the wiring may be charged extra as per the prevailing practice.

3 kW SPV Power Plant:

Sr. No.	Particulars		Specifications
			3 kW SPV Plant
1	Solar PV Modules		Crystalline Silicon
	a	Capacity	3000 W
	b	Make	Any MNRE approved OR IEC 61215 (revised)
	c	Module	74/100/180/200/220/250/280Wp
	d	No. of SPV Modules	Depends on Module wattage
2	Module Mounting Structure		MS hot dip galvanized with thickness of galvanization in between 80 to 120 micron as per the site condition.
3	Power Conditioning Unit		1 No.
	Inverter		3.75 kVA (As per IEC 61683, IEC 60068-2)
	Charge Controller		As per IEC 62093, IEC 60068-2
4	Battery(Lead Acid, tubular positive plate flooded electrolyte or Gel / VRLA Type) (2 Volt, 750 Ah battery must be used)		750Ah / 48 V
5	Cabling		Min. 20 m
6	Monitoring, Control & protection device		1 Set
7	Metering at generation side		1 No. DC Watt-hour meter with USB port facility.
8	Metering at consumption side		1 No. AC Energy Meter with USB port facility.
9	Spares		Set of required fuses, screws & terminals etc as required.
10	Junction Boxes/Enclosures		IP 65 (for outdoor)/IP 21 (for indoor) IEC 62208
11	GI Pipe Earthing System conforming		As per IS:3043 – 1966
12	Lightning & Over Voltage Protection		System conforming provisions of IS:3070

Note:- Above 20 m length, the wiring may be charged extra as per the prevailing practice.

5 kW SPV Power Plant:

Sr. No.	Particulars		Specifications
1	Solar PV Modules		Crystalline Silicon
	a	Capacity	5000W
	b	Make	Any MNRE approved OR IEC 61215 (revised)
	c	Module	200/220/250/280Wp
	d	No. of SPV Modules	Depends on Module wattage
2	Module Mounting Structure		MS hot dip galvanized with thickness of galvanization in between 80 to 120 micron as per the site condition.
3	Power Conditioning Unit		1 No.
	Inverter		7 kVA (As per IEC 61683, IEC 60068-2)
	Charge Controller		As per the requirement (IEC 62093, IEC 60068 -2)
4	Battery (Lead Acid, tubular positive plate flooded electrolyte or Gel / VRLA Type) (2 Volt, 600 Ah battery must be used)		600Ah/120V (As per IEC 61427 IS 1651/IS 133369)
5	Cabling		Min. 50 m
6	Monitoring, Control & protection device		1 Set 1 Set
7	Metering at generation side		1 No. DC Watt-hour meter with USB port facility.
8	Metering at consumption side		1 No. AC Energy Meter with USB port facility.
9	Spares		Set of required fuses, screws terminals etc as required.
10	Junction Boxes/Enclosures		IP 65 (for outdoor)/IP 21 (for indoor) IEC 62208
11	GI Pipe Earthing System conforming		As per IS:3043 – 1966
12	Lightning & Over Voltage Protection		System conforming provisions of IS:3070

Note:- Above 50 m length, the wiring may be charged extra as per the prevailing practice.

10 kW SPV Power Plant:

Sr. No.	Particulars	Specifications
		10 kW SPV Plant
1	Solar PV Modules	Crystalline Silicon
	a Capacity	10000W
	b Make	Any MNRE approved OR IEC 61215 (revised)
	c Module	200/220/250/280Wp
	d No. of SPV Modules	Depends on Module wattage
2	Module Mounting Structure	MS hot dip galvanized with thickness of galvanization in between 80 to 120 micron as per the site condition.
3	Power Conditioning Unit	1 No.
	Inverter	15 kVA (As per IEC 61683, IEC 60068-2)
	Charge Controller	As per the requirement (IEC 62093, IEC 60068 -2)
4	Battery (Lead Acid, tubular positive plate flooded electrolyte or Gel / VRLA Type) (2 Volt, 600 Ah battery must be used)	600Ah / 240V (As per IEC 61427 IS 1651/IS 133369)
5	Cabling	Min. 50 m
6	Monitoring, Control & protection device	1 Set
7	Metering at generation side	1 No. DC Watt-hour meter with USB port facility.
8	Metering at consumption side	1 No. AC Energy Meter with USB port facility.
9	Spares	Set of required fuses, screws & terminals etc as required.
10	Junction Boxes/Enclosures	IP 65 (for outdoor)/IP 21 (for indoor) IEC 62208
11	GI Pipe Earthing System conforming	As per IS:3043 – 1966
12	Lightning & Over Voltage Protection	System conforming provisions of IS:3070

Note:- Above 50 m length, the wiring may be charged extra as per the prevailing practice.