

JHARKHAND RENEWABLE ENERGY DEVELOPMENT AGENCY (JREDA)

3rd Floor, SLDC Building, Kusai, Doranda, Ranchi- 834002.

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Very Short Notice Inviting e-quotation

Notice No. Energy/JREDA/Ranchi/05/22-23

Government of Jharkhand through its Jharkhand Renewable Energy Development Agency (JREDA) is engaged in framing/revision of Schedule of Rates and as part of this endeavor, quotations through e-tender are invited for rate of items/materials annexed as Annexure-1 for Renewable Energy Projects from Manufacturer/ authorized dealers/ Suppliers and other stakeholders authorized for respective items having valid GSTIN of materials. The rates conforming to specifications for inclusion in the Schedule of Rates for Government of Jharkhand to be used in different Renewable Energy Projects under JREDA shall be submitted online in the website [Http://Jharkhandtenders.gov.in](http://Jharkhandtenders.gov.in). Details of material and its Specifications are available on the above e-tender portal. The quotationer may download the documents from the website and quote their rate of materials online from 02.05.2022 at 10:00 A.M. to 11.05.2022 up to 03:00 P.M. The quotation will be opened on 13.05.2022 at 3.00 P.M.

The quotation is invited to ascertain and assess the Rate of Materials at par with lowest market rate for framing of Schedule of Rate.

Terms and Condition

1. The quotationer Shall Submit basic rate of material which will be inclusive of Royalty and other taxes but exclusive of GST.
2. The make and Specifications of various materials shall be governed by the relevant Indian Standard (IS) Codes and Specifications as issued by Central Public Works Department (CPWD)/ Concerned Department of Government of India.
3. Quotationer may quote rate for all the materials/ Part of the material for which they are concerned.
4. Manufacturers/ Producers or their authorized dealers shall quote their rate for material which is actually manufactured/produced/procured by them and the rate quoted for other materials shall not be acceptable.
5. The quotationer shall quote latest and authentic rate which shall reflect market rate.
6. The quotationer should have necessary Portal enrolment with their own digital signature Certificate. Quotationers without necessary portal enrolment with their digital signature may quote their rate by uploading in the website, however they

have to submit hard copy of the same duly signed along with necessary documents in the concerned division.

7. The rate quoted by quotationer shall be firm and final.
8. The quotationer shall furnish GST registration no.
9. The undersigned reserves the right to accept or reject/ cancel any or all quotations without assigning any reason thereof.
10. For any query or clarification you may Contact Electrical Executive Engineer

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Address for Communication :-

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Sd/-
Director,
JREDA, Ranchi

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The interested party i.e. the quotationer shall quote price in the following format:

BASIC RATE OF MATERIALS FOR

Sl no	Name of Items	Specifications	Unit	Rate including Royalty and other taxes but excluding GST (in Rs.)	
				(in Figures)	(in Words)
1	2	3	4	5	6

TABLE- 'A'**LIST OF COMMON ITEMS**

SI No	Item Code	Name of Material / Equipment	Technical Specification/IS		Unit
1	M1681	Solar Photo Voltaic (SPV) Polycrystalline modules as per IEC standards and ALMM Approved modules with DCR cell Contents IEC 61215, IEC 61730 Part I and Part II, IEC 61701 certified		1-100	Wp
2	M1682	Solar Photo Voltaic (SPV) Polycrystalline modules as per IEC standards and ALMM Approved modules with DCR cell Contents IEC 61215, IEC 61730 Part I and Part II, IEC 61701 certified		101-200	Wp
3	M1683	Solar Photo Voltaic (SPV) Polycrystalline modules as per IEC standards and ALMM Approved modules with DCR cell Contents IEC 61215, IEC 61730 Part I and Part II, IEC 61701 certified		201 - 300	Wp
4	M1684	Solar Photo Voltaic (SPV) Polycrystalline modules as per IEC standards and ALMM Approved modules with DCR cell Contents IEC 61215, IEC 61730 Part I and Part II, IEC 61701 certified		301-400	Wp
5	M1685	Solar Photo Voltaic (SPV) Polycrystalline modules as per IEC standards and ALMM Approved modules with DCR cell Contents IEC 61215, IEC 61730 Part I and Part II, IEC 61701 certified		401-500	Wp
6	M1686	Solar Photo Voltaic (SPV) Polycrystalline modules as per IEC standards and ALMM Approved modules with DCR cell Contents IEC 61215, IEC 61730 Part I and Part II, IEC 61701 certified		501-600	Wp
7	M1687	Solar Photo Voltaic (SPV) Polycrystalline modules as per IEC standards and ALMM Approved modules with Non-DCR cell Contents IEC 61215, IEC 61730 Part I and Part II, IEC 61701 certified		1-100	Wp
8	M1688	Solar Photo Voltaic (SPV) Polycrystalline modules as per IEC standards and ALMM Approved modules with Non-DCR cell Contents IEC 61215, IEC 61730 Part I and Part II, IEC 61701 certified		101-200	Wp
9	M1689	Solar Photo Voltaic (SPV) Polycrystalline modules as per IEC standards and ALMM Approved modules with Non-DCR cell Contents IEC 61215, IEC 61730 Part I and Part II, IEC 61701 certified		201 - 300	Wp
10	M1690	Solar Photo Voltaic (SPV) Polycrystalline modules as per IEC standards and ALMM Approved modules with Non-DCR cell Contents IEC 61215, IEC 61730 Part I and Part II, IEC 61701 certified		301-400	Wp

11	M1691	Solar Photo Voltaic (SPV) Polycrystalline modules as per IEC standards and ALMM Approved modules with Non-DCR cell Contents IEC 61215, IEC 61730 Part I and Part II, IEC 61701 certified		401-500	Wp
12	M1692	Solar Photo Voltaic (SPV) Polycrystalline modules as per IEC standards and ALMM Approved modules with Non-DCR cell Contents IEC 61215, IEC 61730 Part I and Part II, IEC 61701 certified		501-600	Wp
13	M1693	Grid-Tied String/Central Inverter for SPV Power Plant Capacity (kWp) as per IEC standard		1 KVA - 10 KVA	KVA
14	M1694	Grid-Tied String/Central Inverter for SPV Power Plant Capacity (kWp) as per IEC standard		11 KVA - 20 KVA	KVA
15	M1695	Grid-Tied String/Central Inverter for SPV Power Plant Capacity (kWp) as per IEC standard		21 KVA - 50 KVA	KVA
16	M1696	Grid-Tied String/Central Inverter for SPV Power Plant Capacity (kWp) as per IEC standard		51 KVA - 100 KVA	KVA
17	M1697	Grid-Tied String/Central Inverter for SPV Power Plant Capacity (kWp) as per IEC standard		100KVA - 500 KVA	KVA
18	M1698	Grid-Tied String/Central Inverter for SPV Power Plant Capacity (kWp) as per IEC standard		500KVA - 1000 KVA	KVA
19	M1699	Grid-Tied String/Central Inverter for SPV Power Plant Capacity (kWp) as per IEC standard		1000KVA - 2000 KVA	KVA
20	M1700	Grid-Tied String/Central Inverter for SPV Power Plant Capacity (kWp) as per IEC standard		2000KVA - 3000KVA	KVA
21	M1701	Hybrid Inverter for SPV Power Plant Capacity (kWp) as per IEC standard		1 KVA - 10 KVA	KVA
22	M1702	Hybrid Inverter for SPV Power Plant Capacity (kWp) as per IEC standard		11 KVA - 20 KVA	KVA
23	M1703	Hybrid Inverter for SPV Power Plant Capacity (kWp) as per IEC standard		21 KVA - 50 KVA	KVA
24	M1704	Hybrid Inverter for SPV Power Plant Capacity (kWp) as per IEC standard		51 KVA - 100 KVA	KVA
25	M1705	Storage Battery Lead Acid type AGM-VRLA 24V/48V/96V/120V/240V/480V Efficiency shall be >98% ,2V /Design for C10 rate		1-400	Ah/2V
26	M1706	Storage Battery Lead Acid type AGM-VRLA 24V/48V/96V/120V/240V/480V Efficiency shall be >98% ,2V /Design for C10 rate		Above 400	Ah/2V
27	M1707	Storage Battery Lead Acid type Tubular Gel 24V/48V/96V/120V/240V/480V Efficiency shall be >98% ,2V /Design for C10 rate		1-400	Ah/2V
28	M1708	Storage Battery Lead Acid type Tubular Gel 24V/48V/96V/120V/240V/480V Efficiency shall be >98% ,2V /Design for C10 rate		Above 400	Ah/2V

29	M1709	Storage Battery Li- Ion Ferro Phosphate 24V/48V/96V/120V/240V/480V Efficiency shall be >98% ,2V /Design for C10 rate		1-400	Ah/2V
30	M1710	Storage Battery Li- Ion Ferro Phosphate 24V/48V/96V/120V/240V/480V Efficiency shall be >98% ,2V /Design for C10 rate		Above 400	Ah/2V
31	M1711	Storage Battery Li- Ion Ferro Phosphate 12.8V Efficiency shall be >98% ,2V /Design for C10 rate		12.5-30	Ah/2V
32	M1712	Storage Battery Li- Ion Ferro Phosphate 12.8V Efficiency shall be >98% ,2V /Design for C10 rate		31-80	Ah/2V
33	M1713	Storage Battery Li- Ion Ferro Phosphate 12.8V Efficiency shall be >98% ,2V /Design for C10 rate		81 - 120	Ah/2V
34	M1714	W-LED Luminaries		2W - 5W	Watt
35	M1715	W-LED Luminaries		5W-10W	Watt
36	M1716	W-LED Luminaries		10W-20W	Watt
37	M1717	W-LED Luminaries		20W-40W	Watt
38	M1718	Cu Cables (1C,2C,3C,4C)		1sq mm - 500 sq mm	Mtr
39	M1719	Armoured Cables (1C,2C,3C,4C)		1sq mm - 500 sq mm	Mtr
40	M1720	Module Mounting Structure			Kg
41	M1721	Bi-Directional Meter Class A & B 1-Phase 2 wire 50Hz, 220V system, Class 1.0 & 2.0 (IS13799/1999) (IEC1036,IEC62052)			Nos
42	M1722	Bi-Directional Meter Class A & B 3-Phase, 4 wire 50Hz, 440V system, (IS13799/1999) (IEC1036,IEC62052)			
43	M1723	DC Distribution Board (DCDB), (24V - 120V), (120V-240V), (240V - 400V), (400V - 1500V) Degree of Protection 1) SPD (Range UC 275V, UN230V, Imax-80kA, In 5kA, Protection Level 1kV 2) Fuse (0.5Amp - 15Amp) DC IP (54/65/67)		1KVA - 100 KVA	Nos
44	M1724	AC Distribution Board (ACDB), (24V - 120V), (120V-240V), (240V - 400V) Degree of Protection 1) SPD (Range UC 275V, UN230V, Imax-80kA, In 5kA, Protection Level 1kV 2) Fuse (0.5Amp - 15Amp) DC IP (54/65/67)		1KVA - 100 KVA	Nos
45	M1725	"Earthing (Cu,GI,Al) (IS:3043-2018) & (IS 732:2019)" (Cu,GI,Al) (IS:3043-2018) & (IS 732:2019)			Set
46	M1726	Lightning Protection 1) SPD (Range UC 275V, UN230V, Imax-80kA, In 5kA, Protection Level 1kV 2) Fuse (0.5Amp - 15Amp) DC (IS/IEC 62305) 1) Franklin Type upto 107 mtr. 2) ESE Type upto 107 mtr.			Set

47	M1727	<p style="text-align: center;">Fire Extinguishers</p> <p>1) AFFF foam Class A and B (flammable liquids) Safe on electrical equipment if di-electrically tested.</p> <p>2) Carbon dioxide (CO2) Class B and electrical equipment</p> <p>3) ABC powder Class A, B, C (flammable gases) and electrical equipment</p>		05kg - 10kg	kg
48	M1728	<p style="text-align: center;">Danger Boards and Signage</p> <p>1) Danger Notice Plates shall comply with IS:2551-1982</p> <p>2) For display at 415 V installations 200x150mm Size.</p> <p>3) For display at 11 KV (or higher voltages) installations - 250x200mm Size.</p> <p>4) Visual examination as per IS:2551-1982</p> <p>5) Dimensional check as per IS:2551-1982.</p> <p>6) Test for weather proofness as per IS:8709-1977.</p>			Nos
49	M1729	<p style="text-align: center;">Remote Monitoring Unit</p> <p>1) Interface Rs 485 modbus flash memory =>16MB, (12V - 24V), IP 65 Protected.</p>			Set
50	M1730	<p style="text-align: center;">Sensor(Temperature & Irradiance)</p> <p>1) Temperature Sensor-Paste Type Sensor, Range -50 To +100 degree Celsius, -20 to 50 degree celsius, Supply Voltage 12V - 24 V DC, Accuracy +- 0.5 Degree Celsius, Output Rs 485 Cable size mtr.</p> <p>2) Irradiance Sensor - Spectral range 300-1100 NM, Range 0-1500 watt per mtr sq., Supply Voltage 12V - 24 V DC.IP 65 Protected.</p>			Set
51	M1731	DC Charge Controller MPPT		5 Amp - 25 Amp	VA
52	M1732	<p>Protection 1) SPD (Range UC 275V, UN230V, Imax-80kA, In 5kA, Protection Level 1kV 2) Fuse (0.5Amp - 15Amp) DC</p> <p>1) SPD (Range UC 275V, UN230V, Imax-80kA, In 5kA, Protection 1) SPD (Range UC 275V, UN230V, Imax-80kA, In 5kA, Protection Level 1kV 2) Fuse (0.5Amp - 15Amp) DC Level 1kV 2) Fuse (0.5Amp - 15Amp) DC</p>			VA
53	M1733	Pole Galvanized Iron (GI) Class B pipe and should be minimum 3.2 mm thick and should have minimum outer diameter of 76 mm total height of pole 6 meter with Battery Box and G.I. base plate (15" x 15" x 1)CM thickness.Pole height 5 m above the ground level and 1 m below the ground. Luminaire shall be at least 4.5 m above the ground level.			Nos.

54	M1734	Pole Galvanized Iron (GI) Class B pipe and should be minimum 3.2 mm thick and should have minimum outer diameter of 76 mm total height of pole 7 meter with Battery Box and G.I. base plate (15" x 15" x 1)CM thickness.Pole height 5.5 m above the ground level and 1 m below the ground. Luminaire shall be at least 5.5 m above the ground level.			
55	M1735	3watt Light Source /W LED			Watt
56	M1736	5watt Light Source /W LED			Watt
57	M1737	7watt Light Source /W LED			Watt
58	M1738	Lamp Light Output with wo levels of light (operation at 100 % power and 60% power) to take care-of the different lighting needs, as per the User requirements. Minimum level of illumination from W-LED			Nos
59	M1739	Protection 1) SPD (Range UC 275V, UN230V, Imax-80kA, In 5kA, Protection Level 1kV 2) Fuse (0.5Amp - 15Amp) DC			VA
60	M1740	FLAT PLATE COLLECTOR			Set
61	M1741	COLLECTOR SUPPORT FRAME			Set
62	M1742	STORAGE TANK (HOT WATER) Material SS 304 or 316 grade thickness 20 /18/14 gauge			Nos
63	M1743	Thermal Insulation of Storage tank Minimum 50 mm thick CFC free PUF having density of 28-32kg/ cu. m for domestic systems and 100mm thick Rockwool of 48 kg per cu. m for other systems.			Nos
64	M1744	COLD WATER TANK of HDPE/LDPE material with Gun metal float valve (ISI marked)			Nos
65	M1745	Piping GI			Mtr
66	M1746	MAKE UP TANK			Nos
67	M1747	STANDS & PEDESTALS FOR THE TANKS The tanks will be mounted on stands made out of angle iron frame of 35x35x4mm up to 500 liters, 50x50x6 mm up to 2000LPD and 65x65x6mm for capacity above 2000 liters with each leg duly grouted with PCC 1:2:4 of 1'x1'x1' size.			Nos
68	M1748	HEAT EXCHANGER (SHELL/ COIL) Cu/SS tube of ¾" dia. for thermo siphon systems only and It shall be so designed to ensure that pressure drop is less than 0.3 kg/cm. The surface area of the heat exchanger should not be less than 0.24 sq. m per sq. m of the absorber area of the system (for 100 LPD system, the tube length of 7 meter is required).			Nos
69	M1749	Elcetrical Backup			VA

70	M1750	Light Source White Light Emitting Diode (W-LED) 40 Watt(LED +Driver)			Sets
71	M1751	Mast The Octagonal poles shall be Hot deep galvanized to min 80 microns. The material of pole shall be as per specification of BS EN 100025, ISO 1461. The size of the pole shall be min 150 mm (A/F) at Top side, 410 mm (A/F) at bottom side with thickness of 3 mm minimum. Diameter of base plate (mm) = 580mm; Thickness of base plate (mm) = 20mm. Pole should have the arrangement at top for mounting of Solar panel of design capacity with mounting structure at an angle of latitude +20 degree. The four LED luminaries shall be mounted on this pole at height of 6.5 meter from pole bottom. The battery either two or four shall also be mounted on this pole at suitable height hence provision should be made accordingly. The pole shall be mounted on suitable RCC foundation at least 1.5 meter deep and 600mm above ground with 4 bolt of min 24 mm size. The			Nos
72	M1752	Charge Controller			VA
73	M1753	Protection 1) SPD (Range UC 275V, UN230V, Imax-80kA, In 5kA, Protection Level 1kV 2) Fuse (0.5Amp - 15Amp) DC			VA
74	M1754	Sensor			VA
75	M1755	Design, Supply, Installation, and Testing & Commissioning of 1.0 MT Capacity (Internal Space -150 CFT) Solar Cold Storage unit including five years Comprehensive Maintenance Contract (CMC) on Turnkey basis.			MT Capacity
76	M1756	Thermal Storage System			MT Capacity
77	M1757	charge Controller			VA
78	M1758	Cold Room			MT Capacity
79	M1759	VFD Drive			Hp
80	M1760	Module Mounting Structure			watt
81	M1761	Condensing unit			Watt
82	M1762	Evaporator unit			temp
83	M1763	Refrigerant			RT
84	M1764	Protection 1) SPD (Range UC 275V, UN230V, Imax-80kA, In 5kA, Protection Level 1kV 2) Fuse (0.5Amp - 15Amp) DC			VA
85	M1765	Sensor			VA
86	M1766	"Earthing (Cu,GI,Al) (IS:3043-2018) & (IS 732:2019)"			nos.

87	M1767	Lighting Protection 1) SPD (Range UC 275V, UN230V, I _{max} -80kA, In 5kA, Protection Level 1kV 2) Fuse (0.5Amp - 15Amp) DC			nos.
88	M1768	Solar DC Charge Controller			VA
89	M1769	Protection 1) SPD (Range UC 275V, UN230V, I _{max} -80kA, In 5kA, Protection Level 1kV 2) Fuse (0.5Amp - 15Amp) DC			VA
90	M1770	Solar BLDC Fan 25 watt			Watt
91	M1771	1 HP AC SPV Water Pumping system, complete set (Water filled, Surface Pumps)		Without USPC	Set
92	M1772	1 HP DC SPV Water Pumping system, complete set (Water filled, Surface Pumps)		Without USPC	Set
93	M1773	1 HP AC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)		Without USPC	Set
94	M1774	1 HP DC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)		Without USPC	Set
95	M1775	2 HP AC SPV Water Pumping system, complete set (Water filled, Surface Pumps)		Without USPC	Set
96	M1776	2 HP DC SPV Water Pumping system, complete set (Water filled, Surface Pumps)		Without USPC	Set
97	M1777	2 HP AC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)		Without USPC	Set
98	M1778	2 HP DC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)		Without USPC	Set
99	M1779	3 HP AC SPV Water Pumping system, complete set (Water filled, Surface Pumps)		Without USPC	Set
100	M1780	3 HP DC SPV Water Pumping system, complete set (Water filled, Surface Pumps)		Without USPC	Set
101	M1781	3 HP AC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)		Without USPC	Set
102	M1782	3 HP DC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)		Without USPC	Set
103	M1783	5 HP AC SPV Water Pumping system, complete set (Water filled, Surface Pumps)		Without USPC	Set
104	M1784	5 HP DC SPV Water Pumping system, complete set (Water filled, Surface Pumps)		Without USPC	Set
105	M1785	5 HP AC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)		Without USPC	Set
106	M1786	5 HP DC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)		Without USPC	Set
107	M1787	7.5 HP AC SPV Water Pumping system, complete set (Water filled, Surface Pumps)		Without USPC	Set
108	M1788	7.5 HP DC SPV Water Pumping system, complete set (Water filled, Surface Pumps)		Without USPC	Set
109	M1789	7.5 HP AC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)		Without USPC	Set

110	M1790	7.5 HP DC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)		Without USPC	Set
111	M1791	10 HP AC SPV Water Pumping system, complete set (Water filled, Surface Pumps)		Without USPC	Set
112	M1792	10 HP DC SPV Water Pumping system, complete set (Water filled, Surface Pumps)		Without USPC	Set
113	M1793	10 HP AC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)		Without USPC	Set
114	M1794	10 HP DC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)		Without USPC	Set
115	M1795	1 HP AC SPV Water Pumping system, complete set (Water filled, Surface Pumps)		With USPC	Set
116	M1796	1 HP DC SPV Water Pumping system, complete set (Water filled, Surface Pumps)		With USPC	Set
117	M1797	1 HP AC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)		With USPC	Set
118	M1798	1 HP DC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)		With USPC	Set
119	M1799	2 HP AC SPV Water Pumping system, complete set (Water filled, Surface Pumps)		With USPC	Set
120	M1800	2 HP DC SPV Water Pumping system, complete set (Water filled, Surface Pumps)		With USPC	Set
121	M1801	2 HP AC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)		With USPC	Set
122	M1802	2 HP DC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)		With USPC	Set
123	M1803	3 HP AC SPV Water Pumping system, complete set (Water filled, Surface Pumps)		With USPC	Set
124	M1804	3 HP DC SPV Water Pumping system, complete set (Water filled, Surface Pumps)		With USPC	Set
125	M1805	3 HP AC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)		With USPC	Set
126	M1806	3 HP DC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)		With USPC	Set
127	M1807	5 HP AC SPV Water Pumping system, complete set (Water filled, Surface Pumps)		With USPC	Set
128	M1808	5 HP DC SPV Water Pumping system, complete set (Water filled, Surface Pumps)		With USPC	Set
129	M1809	5 HP AC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)		With USPC	Set
130	M1810	5 HP DC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)		With USPC	Set
131	M1811	7.5 HP AC SPV Water Pumping system, complete set (Water filled, Surface Pumps)		With USPC	Set
132	M1812	7.5 HP DC SPV Water Pumping system, complete set (Water filled, Surface Pumps)		With USPC	Set

133	M1813	7.5 HP AC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)		With USPC	Set
134	M1814	7.5 HP DC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)		With USPC	Set
135	M1815	10 HP AC SPV Water Pumping system, complete set (Water filled, Surface Pumps)		With USPC	Set
136	M1816	10 HP DC SPV Water Pumping system, complete set (Water filled, Surface Pumps)		With USPC	Set
137	M1817	10 HP AC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)		With USPC	Set
138	M1818	10 HP DC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)		With USPC	Set
139	M1795	1 HP AC Water Pumping set (Water filled, Surface Pumps)		With USPC	Set
140	M1796	1 HP DC Water Pumping set (Water filled, Surface Pumps)		With USPC	Set
141	M1797	1 HP AC Water Pumping set (Water filled, Submersible Pumps)		With USPC	Set
142	M1798	1HP DC Water Pumping set (Water filled, Submersible Pumps)		With USPC	Set
143	M1799	2 HP AC Water Pumping set (Water filled, Surface Pumps)		With USPC	Set
144	M1800	2 HP DC Water Pumping set (Water filled, Surface Pumps)		With USPC	Set
145	M1801	2 HP AC Water Pumping set (Water filled, Submersible Pumps)		With USPC	Set
146	M1802	2HP DC Water Pumping set (Water filled, Submersible Pumps)		With USPC	Set
147	M1803	3 HP AC Water Pumping set (Water filled, Surface Pumps)		With USPC	Set
148	M1804	3 HP DC Water Pumping set (Water filled, Surface Pumps)		With USPC	Set
149	M1805	3 HP AC Water Pumping set (Water filled, Submersible Pumps)		With USPC	Set
150	M1806	3HP DC Water Pumping set (Water filled, Submersible Pumps)		With USPC	Set
151	M1807	5 HP AC Water Pumping set (Water filled, Surface Pumps)		With USPC	Set
152	M1808	5 HP DC Water Pumping set (Water filled, Surface Pumps)		With USPC	Set
153	M1809	5 HP AC Water Pumping set (Water filled, Submersible Pumps)		With USPC	Set
154	M1810	5 HP DC Water Pumping set (Water filled, Submersible Pumps)		With USPC	Set
155	M1811	7.5 HP AC Water Pumping set (Water filled, Surface Pumps)		With USPC	Set

156	M1812	7.5 HP DC Water Pumping set (Water filled, Surface Pumps)		With USPC	Set
157	M1813	7.5 HP AC Water Pumping set (Water filled, Submersible Pumps)		With USPC	Set
158	M1814	7.5 HP DC Water Pumping set (Water filled, Submersible Pumps)		With USPC	Set
159	M1815	10 HP AC Water Pumping set (Water filled, Surface Pumps)		With USPC	Set
160	M1816	10 HP DC Water Pumping set (Water filled, Surface Pumps)		With USPC	Set
161	M1817	10 HP AC Water Pumping set (Water filled, Submersible Pumps)		With USPC	Set
162	M1818	10 HP DC Water Pumping set (Water filled, Submersible Pumps)		With USPC	Set
163	M1819	Control Pannel		0.5KVA - 10 KVA	VA
164	M1820	Protection 1) SPD (Range UC 275V, UN230V, Imax-80kA, In 5kA, Protection Level 1kV 2) Fuse (0.5Amp - 15Amp) DC			VA
165	M1821	"Earthing (Cu,GI,Al) (IS:3043-2018) & (IS 732:2019)"			Nos.
166	M1822	Module Mounting Structure			Kg
167	M1823	DC Distribution Board (DCDB)			Nos
168	M1824	AC Distribution Board (ACDB)			Nos
169	M1825	"Earthing (Cu,GI,Al) (IS:3043-2018) & (IS 732:2019)"			Nos
170	M1826	Lightning Protection 1) SPD (Range UC 275V, UN230V, Imax-80kA, In 5kA, Protection Level 1kV 2) Fuse (0.5Amp - 15Amp) DC			Nos
171	M1827	Fire Extinguishers			Nos
172	M1828	Danger Boards and Signage			Nos
173	M1829	Remote Monitoing Unit			Nos
174	M1830	Solar Torch Light (Dragon Torch)			watt
175	M1831				inch
176	M1832	Golf Cart -EV Two,Four,Six seater Golf car Motar capacity 4 kW DC Battery 8V 170Ahx6 Maximum Loading weight 360Kg Speed 24 Kmph Range 80-100 Km Frame/Chassis- steel Tubeless Tyre Pulse Charger			

177	M1833	Standalone Electric Solar Golf Cart Two, Four, Six seater Golf car Motor capacity 4 kW DC Module Capacity 500 watt Battery 8V 170Ahx6 Maximum Loading weight 360Kg Speed 24 Kmph Range 80-100 Km Frame/Chassis- Steel, Body material- FRP colour Coated. Tubeless Tyre Pulse Charger		
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Table - 'B'

Cost of Grid Connected Rooftop Solar Power Plant

Sl. No.	Item Code	Capacity	(Rs/KWp)
178	M1834	1 KWp	
179	M1835	Above 1 KWp – 2 KWp	
180	M1836	Above 2 KWp – 3 KWp	
181	M1837	Above 3 KWp – 10 KWp	
182	M1838	Above 10 KWp – 100 KWp	
183	M1839	Above 100 KWp – 500 KWp	
184	M1840	Above 500 KWp – 1000 KWp	
185	M1841	Above 1000 KWp – 1500 KWp	
186	M1842	Above 1500 KWp – 2000 KWp	

Note:

1. The above-mentioned benchmark costs are excluding **net metering cost** and battery back-up costs.
2. **The above benchmark costs are inclusive of** total system cost including Photo-Voltaic solar modules, inverters, balance of systems including cables, Switches/Circuit Breakers /Connectors/ Junction Boxes, mounting structure, earthing, Lightning arrester, cost of meters (if any other than net meter), local connectivity cost, cost of civil works, foundations etc. and its installation, commissioning, transportation, insurance, capital cost of online monitoring, comprehensive maintenance charges for five years, **applicable fees and taxes** etc.

Cost of Standalone Solar Power Plants (Off-Grid)/ Packs

Sl.No.	Item Code	Capacity	Battery back-up (Hrs)	(Rs/Wp)
187	M1843	Upto 10 KWp	12	
188	M1844	Upto 10 KWp	6	
189	M1845	Upto 10 KWp	3	
190	M1846	Upto 10 KWp	1	
191	M1847	Above 10 kW – 25 KWp	12	
192	M1848	Above 10 kW – 25 KWp	6	
193	M1849	Above 10 kW – 25 KWp	3	
194	M1850	Above 10 kW – 25 KWp	1	
195	M1851	Above 25 kW – 50 KWp	12	
196	M1852	Above 25 kW – 50 KWp	6	
197	M1853	Above 25 kW – 50 KWp	3	
198	M1854	Above 25 kW – 50 KWp	1	
199	M1855	Above 50 kW – 100 KWp	12	
200	M1856	Above 50 kW – 100 KWp	6	
201	M1857	Above 50 kW – 100 KWp	3	
202	M1858	Above 50 kW – 100 KWp	1	
203	M1859	Above 100 kW	12	
204	M1860	Above 100 kW	6	
205	M1861	Above 100 kW	3	
206	M1862	Above 100 kW	1	

Note:

1. Cost includes Remote Monitoring
2. Above cost is exclusive GST.

Cost for Standalone Solar Lighting Systems as per scope of MNRE

Sl.No.	Item Code	System	Benchmark Cost Rs/System
207	M1863	Solar Home Lighting system of 200Watt Module 12.8V 80Ah Li battery, 3No. LED Bulb 25Watt DC Fan	
208	M1864	Solar Home Lighting system of 300Watt Module Li battery, 3No. LED Bulb 25Watt DC Fan	
209	M1865	Solar High Mast Light System complete set with 200WX4 Nos. of Module, 12.8V 120Ah Li Battery & LED Luminaries of 40W	
210	M1866	Solar LED Lantern Complete Set with 5 Watt Module 3W LED & 7.4V-2.4AH	
211	M1867	Solar LED Lantern Complete Set with 8 Watt Module 5W LED & 6.4V-6AH	
212	M1868	Solar LED Lantern Complete Set with 12 Watt Module 7W LED & 12.8V-6AH	
213	M1869	Solar Study Lamps (2.5 Wp Solar Panel, 1 Watt LED, 3.2 V – 2000 mAH Lithium Battery)	
214	M1870	Complete Solar Street Lighting Systems of 40 W Module 12.5Ah. Li Battery, 7 watt Luminaries & 5 mtr Pole	
215	M1871	Complete Solar Street Lighting Systems of 75 W Module 30Ah. Li Battery 12 watt Luminaries & 5 Mtr Pole	Complete Solar Street Lighting Systems of 75 W Module 30Ah. Li Battery & 12 watt Luminaries
216	M1872	Complete Solar Street Lighting Systems of 150 W Module 60Ah. Li Battery, 30 watt Luminaries & 7 mtr Pole.	Complete Solar Street Lighting Systems of 150 W Module 60Ah. Li Battery & 30 watt Luminaries
217	M1873	Complete Solar Street Lighting Systems of 100 W Module 40Ah. Li Battery 20 watt Luminaries & 7 mtr Pole.	Complete Solar Street Lighting Systems of 100 W Module 40Ah. Li Battery & 20 watt Luminaries
218	M1874	Complete Solar Street Lighting Systems of 200 W Module 80Ah. Li Battery 40 watt Luminaries & 7 mtr Pole.	Complete Solar Street Lighting Systems of 200 W Module 80Ah. Li Battery & 40 watt Luminaries

Costs 2021-22: Solarization of Grid-connected Agriculture Pumps				
Sl.No.	Item Code	Capacity		Cost (Rs/KW)
219	M1875	Above 1 KW & Upto 3 KW		
220	M1876	Above 3 KW & Upto 6 KW		
221	M1877	Above 6 & Up to 10 kW		
222	M1878	Above 10 KW & Upto 15 KW		
Cost of Standalone Solar Pumps (Off-Grid)				
Sl.No.	Item Code	Pump Capacity	Pump Type	(Rs/Pump)
223	M1879	1 HP AC SPV Water Pumping system, complete set (Water filled, Surface Pumps)	Without USPC	
224	M1880	1 HP DC SPV Water Pumping system, complete set (Water filled, Surface Pumps)	Without USPC	
225	M1881	1 HP AC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)	Without USPC	
226	M1882	1 HP DC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)	With USPC	
227	M1883	2 HP AC SPV Water Pumping system, complete set (Water filled, Surface Pumps)	Without USPC	
228	M1884	2 HP DC SPV Water Pumping system, complete set (Water filled, Surface Pumps)	With USPC	
229	M1885	2 HP AC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)	Without USPC	

230	M1886	2 HP DC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)	With USPC	
231	M1887	3 HP AC SPV Water Pumping system, complete set (Water filled, Surface Pumps)	Without USPC	
232	M1888	3 HP DC SPV Water Pumping system, complete set (Water filled, Surface Pumps)	With USPC	
233	M1889	3 HP AC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)	Without USPC	
234	M1890	3 HP DC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)	Without USPC	
235	M1891	5 HP AC SPV Water Pumping system, complete set (Water filled, Surface Pumps)	Without USPC	
236	M1892	5 HP DC SPV Water Pumping system, complete set (Water filled, Surface Pumps)	With USPC	
237	M1893	5 HP AC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)	Without USPC	
238	M1894	5 HP DC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)	With USPC	
239	M1895	7.5 HP AC SPV Water Pumping system, complete set (Water filled, Surface Pumps)	Without USPC	

240	M1896	7.5 HP DC SPV Water Pumping system, complete set (Water filled, Surface Pumps)	With USPC	
241	M1897	7.5 HP AC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)	Without USPC	
242	M1898	7.5 HP DC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)	With USPC	
243	M1899	10 HP AC SPV Water Pumping system, complete set (Water filled, Surface Pumps)	Without USPC	
244	M1900	10 HP DC SPV Water Pumping system, complete set (Water filled, Surface Pumps)	Without USPC	
245	M1901	10 HP AC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)	Without USPC	
246	M1902	10 HP DC SPV Water Pumping system, complete set (Water filled, Submersible Pumps)	With USPC	

Note:

1. Cost includes Remote Monitoring
2. Above cost is inclusive GST as per revised order from MNRE.