

Gujarat Rooftop Solar PV System



Paschim Gujarat Vij Company Ltd Technical Specification

EOI No: PGVCL/DSM/EOI/SRT/2019-20/01

SI.N	Part	Specification	Remarks as per PGVCL tender
1	Panel	1) Minimum 250W 2) Efficiency - higher than 15% 3) Temperature coefficient - Not less than -0.50%/degree celcius 4) IEC 61215, IS 14286, IS /IEC 61730, IEC 61853 part 1 & IS 16170-part1	1) Solar Module & Cell - Domestically manufactured & made in india 2) Warranty - above 97% during 1st yr installation / above 90% for 1st 10yrs / above 80% for next 15Yrs
2	Inverter	1) Single Phase - 6KW or below 6KW / Three Phase - Above 6KW 2) Peak Efficiency - Above 10KW - 97% & Below 10KW 96% 3) PV array capacity should be 100% -110% of invertor capacity 4) IEC 61683/IS 61683 & IEC 60068-2 (1,2,14,30) 5) Over load capacity - Minimum 15%	Subsidy calculation of Minimum of following 3 shall be considered. 1) Applied SPV Capacity in KW at the time og Registration 2) Solar PV array capacity in KWp 3) Invertor capacity in KW
3	Structure	1) Hot dip galvanised MS mounting structure 2) Steel - IS 2062:2011 & hot dip galvanized - IS 4759 3) HDGI zin coating thickness - minimum 80 micron 4) Clearance - 300mm 5) Material thickness - Minimum 2.5mm	Should withstand 150Km/hr wind Speed
4	Cables	1) IEC 60227/IS 694, IEC 60502 /IS1554 2) voltage drop - AC cable max 2% / DC cable max 1% 3) Temp.range - -10 degree to +80 degree celcius 4) Flexible & voltage range 660/1000V	1) Wiring up to 30m wire length is include in project cost, beyond 30m the cost of wiring shall have to be borne by the beneficiary. 2) Cable should be compatible up to life of solar panel
5	Earthing	1) IS:3043-1987 2) 1.5meter Electrode & 3earth pits (DC side,AC side & Lightning arrestor side) 3) Earth Resistance - as low as possible	
6	Ligntning	1) IEC 62305 2) Copper conductor with cross section of 16mm ²	
7	ACDB	1) Indoor -IP54 & outdoor IP65 2) 1PH 230V / 3PH 415V 3) Ambient temp - 45 degree celcius & 80% humidity & dusty weather 4) Equipment with bus support insulator, CB, SPD, MCB - upto 63A / MCCB -above 63A	
8	DCDB	1) IP 65 2) Suitable capacity MCBs / MCCB shall be provided & bus bar - EC grade copper	
9	Junction Box	1) FRP/GRP/Powder coated aluminium/cast aluminium alloy 2) Suitable cable, lugs, glands, copper busbar, SPD, MOVs	