

**VADODARA MUNICIPAL CORPORATION****STREETLIGHT DEPARTMENT****PRICE BID (Without GST)****YEAR: 2026-27****NAME OF WORK : Providing and Erecting of Solar Roof Top Power Plant at City Control & Command Centre Badamdibaug with comprehensive O&M Work for 10 years. (Re-Invite)**

CAPEX WORK (WITHOUT GST RATES)					
QUANTITY	ITEM NO	ITEM DESCRIPTION	RATE (Rs.)	PER	TOTAL AMOUNT
		Supply, Installation, Testing & Commissioning of following size of Grid Tied Solar Power Plant with Solar Panels (ALMM approved): Frame Material : Anodized Aluminum alloy Frame With Twin Wall Profile, Front Cover : High Transmission Low-Iron Tempered Glass (AR Coated), High efficiency and positive power tolerance Pmax: 0/+5, Module Efficiency should be approx. 19.5%-22%, Normal operating temperature 45°C, Junction Box with Waterproof IP67 & MC4 Compatible and Enclosed with Bypass diodes, 100% Electroluminescence test to ensure error free Modules, Thep. temp. co-efficient of the PV module shall equal or better than - 0.45%/degree C. Solar PV modules of minimum fill factor 75% to be used. Unit Production:- More than 4.5 Unit /kw /day (Actual)(1Year Avg) With 10 year Product warranty and 25 year Linear Power Warranty includes all mechanical and electrical parameters of the Solar panel. Modules must be complied to the DCR(Domestic content requirements). The Ration of AC to DC is 5:6 for the Installation capacity which are given in AC KW.			
		Solar Inverter: MPPT Range: 80-1000 V , Max efficiency: 97.5% - 98.9%, O/p Frequency: 50/60Hz, Operating Altitude (m) ≤ 4000, O/p Power Factor: ~1, O/P THDi: <3%, Operating Temperature Range: -25~60°C, Integrated protection of Inverter are Anti-islanding Protection, Input Reverse Polarity Protection, Insulation Resistor Detection, Ground fault protection, Residual Current Monitoring Unit, Output Over Current Protection, Output Short Circuit Protection, Output Over Voltage Protection, PV array string fault Protection. Protection Degree: IP65, User Interface LCD & APP,			
		Integrated, Input Reverse Polarity Protection Integrated, Insulation Resistor Detection Integrated, Residual Current Monitoring Unit Integrated, Output Over Current Protection Integrated, Output Short Circuit Protection Integrated, Output Over Voltage Protection Integrated, Protection Degree: IP65, User Interface LCD & APP,Datalogger & Communication: GPRS / Wi-Fi, Module Mounting Structure: The mounting (Rectangular pipe / square pipe / circular pipe) with requisite cross bars, nuts and bolts, etc. shall be Hot deep galvanized with minimum 80micron coating. The Rectangular / square /circular hollow pipe section used for the structure should have a minimum thickness of 2.0 mm. other than above, the material thickness should be minimum 2.5 mm. A certificate of a structural engineer certifying the strength and stability of the mounting structure to withstand the weight and wind speed of 150 km/hour throughout the life span of 25 years of the system, shall be submitted by the vendors. Hot Dipped Galvanized steel coils.			
		suitable arrangement for base plate for foundation , solar panel mounting, the structure should be suitable for carry the load of solar panel,wiring, sprinkler system etc. with necessary foundation work/wall mount, j bolt, anchor fastner etc. the nut bolt used for installtion of stucture should be (SS 304) quality.The ground clearance of the bottom most edge of solar panel shall not be less than 300 mm to 1200 mm or as per site's technical/feasibility requirement. a. Column –The minimum section (thickness) should be 60MM*40MM b. Rafter - The minimum section (thickness) should be 60MM*40MM c. Purlin - The minimum section (thickness) should be 40MM * 40MM Balane of System with necessary Swichgears (Suitabel size and protection of ACDB & DCDB), inter connecting wiring, earthing system as per the CEIG drawing approval, lightninging arrester system as per the CEIG drawing approval, all liasoning work with various gov. dipartment like state nodal agency, DISCOM & CEIG is included in			

		(Excluding All charges namely GEDA Application fees, Solar connectivity Charges, Meter connectivity Charges, Meter testing Charges and system stability/strengthening charges.)			
50	1	Grid Tied Solar Power System: 26 - 50 kW (3 - phase)	41739	per KW	2086950.00
	2	Providing & Erecting HT Bidirectional meter as per MGVL Norms.	15750	Each	31500.00
	3	Providing & Erecting LT Solar meter as per MGVL Norms.	5040	Each	5040.00
	4	Providing & Erecting GPRS MODEM as per MGVL Norms.	9450	Each	28350.00
	5	Providing & Erecting LT CT of 100/5 A as per MGVL Norms.	1155	Each	10395.00
	6	Providing & Erecting Prewired with 3 TTB SMC (Sintex) Enclosure with Fabricated Metal Stand For HT BD Meter & Modem	18900	Each	56700.00
			Total (Capex)		2218935.00

OPEX WORK (WITHOUT GST RATES)					
50	4	Operation and Maintenance work of Solar Roof Top Power Plant for 1st year	1356	per KW	67800.00
50	5	Operation and Maintenance work of Solar Roof Top Power Plant for 2nd year	1397	per KW	69850.00
50	6	Operation and Maintenance work of Solar Roof Top Power Plant for 3rd year	1438	per KW	71900.00
50	7	Operation and Maintenance work of Solar Roof Top Power Plant for 4th year	1481	per KW	74050.00
50	8	Operation and Maintenance work of Solar Roof Top Power Plant for 5th year	1526	per KW	76300.00
50	9	Operation and Maintenance work of Solar Roof Top Power Plant for 6th year	1572	per KW	78600.00
50	10	Operation and Maintenance work of Solar Roof Top Power Plant for 7th year	1619	per KW	80950.00
50	11	Operation and Maintenance work of Solar Roof Top Power Plant for 8th year	1668	per KW	83400.00
50	12	Operation and Maintenance work of Solar Roof Top Power Plant for 9th year	1718	per KW	85900.00
50	13	Operation and Maintenance work of Solar Roof Top Power Plant for 10th year	1769	per KW	88450.00
			Total (Opex)		777200.00
			Total (Capex + Opex) (Without GST)		2996135.00