



GEDA

ગુજરાત ઊર્જા વિકાસ એજન્સી
GUJARAT ENERGY DEVELOPMENT AGENCY



Inspection Report for Solar PV Rooftop Project

Project Details

Report No.	/GEDA/00005	Date of Inspection:	22-Mar-2019
	Report Prepared by	Checked by	
Name	Jakes Sparow		
Signature			

Basic System Information

GEDA

Registration TO/RES/10000035

Number:

Consumer

Name :

Installer

Name :

Registered

Capacity [Warning \(2\)](#): number_format() expects parameter 1 to be float, string given [A

(kW) :

Address :

PV Module
and Inverter
Specification

Sr	Equipment	Capacity/Power (Wp)	Make	No
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Sr	Equipment	Capacity/Power (kW)	Make	No
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Cumulative Capacity of PV Modules (kW) :

Capacity/Power of PCU/Inverters (kW) :

Details of Solar PV modules Installed

Sr.	Observation		Please Mark/ Enter Relevant Block	Remarks
1	Type of PV Module	Crystalline Technology	Not Ok	
2	Make of Solar PV Module	Domestic (Produced in India)	Not Ok	
3	PV Module complying IEC certificate	IEC 61215/ IS 14286, IEC 61853-I, IS 16170-I, IEC 61730, IEC 61701	Not Ok	
4	Capacity (Wp) of each PV module	More than 200Wp	Not Ok	
5	Module Protection	Min. IP 65	Not Ok	
6	Module Interconnection cable connectors are protected		Not Ok	
7	PV module are neat and clean		Not Ok	
8	PV Modules electrical connections are tight and secure		Not Ok	
9	Warranty of PV module	Min. 5 Years	Not Ok	

Weather :

Time:

:

Strings	Polarity (OK / NOT OK)	V(Volts)	I(Amps)	Power (Watt)	Remarks
String1	-				
String2	-				
String3	-				
String4	-				

Note:

Details of Module Mounting Structure (MMS)

Sr.	Observation		Please Mark/ Enter Relevant Block	Remarks
1	Structure Material	Hot Dip Galvanized Iron		
2	Fasteners	Stainless Steel	Not Ok	
3	Structure Steel Thickness	Min. 2.5 MM	Not Ok	
4	Structure Properly Installed		Not Ok	
5	Structure Grouting/Foundation		Not Ok	
6	Clearance of the structure from the roof	Minimum 300 MM	Not Ok	

Note:

Details of DCDB

Sr.	Observation	Please Mark/ Enter Relevant Block	Remarks
1	DCDB as per approved Drawing		
2	DCDB Installation	Indoor	
3	Fuse/MCB/ MCCB Protection	Not Ok	
4	Surge Protection device available	Not Ok	
5	DCDB Installed and mounted Properly	Not Ok	
6	Cables terminated properly through glands on gland plate	Not Ok	

Details of ACDB

Sr.	Observation	Please Mark/ Enter Relevant Block	Remarks
1	ACDB as per approved Drawing		
2	ACDB Installation	Indoor	
3	MCB/ MCCB/RCCB Protection	Not Ok	
4	Surge Protection device available	Not Ok	
5	ACDB Installed Properly	Not Ok	
6	Cables terminated properly through glands on gland plate	Not Ok	

Voltage Measurement: 3 Phase

Phase to Phase Voltage **R-N** **Y-N** **B-N**
 V V V

Time : _____

Other Electrical Parameters:

Particulars	R-Phase	Y-Phase	B-Phase	Total
Irms (A)				
Power (kW)				
Frequency (Hz)				
Power Factor (CosΦ)				

Performance Ratio of the System

1	Instantaneous AC Power in Watt at Inverter	
2	Instantaneous Irradiance (kW/m ²)	
3	Module Area (m ²)	
4	Total number of modules	0
5	Module Efficiency in %	
6	Performance Ratio of the System (Instantaneous)	%

Details of Inverter

Sr.	Observation		Please Mark/ Enter Relevant Block	Remarks
1	Inverter Capacity	+/- 10% capacity Tolerance of Plant	Not Ok	
2	Inverter Output Capacity	kVA	Not Ok	
3	Type Of Inverter		Three phase	
4	Inverter Installation		Indoor	
5	Inverter Efficiency	Minimum >95%	Not Ok	
6	Automatic Operation Including Wake-up, Synchronization And Shut Down		Not Ok	
7	Anti-islanding Protection		Not Ok	
8	Built-in Meter And Data Logger	Monitoring plant performance through external computer	Not Ok	
9	Marking Of Inverter Capacity, Rating, Technical Specification	IEC 61727, IEC 61730, IEC 61683, IEC 60068-II (1,2,14,30)/ Equivalent BIS standard	Not Ok	
10	Inverter Properly Installed		Not Ok	
11	Cables Terminated Properly (Crimping And Lugging)		Not Ok	
12	DC Disconnect Available		Not Ok	
13	Terminal Earthing Effectively Earthed		Not Ok	

Details of Earthing Provided

Earth Conductor Material

Total Nos. of Earthing 0

Earthing Conductor As per IS 3043/IEEE80

Earthpit Construction Charcoal-Salt

Lightning Arrester (LA) N/A (If < 10 kW)

Building	Earth Pit	Earth Strip Connection
Building-1	Body Earthing Pit-1 (R < 0.5Ohm)	Not Ok
	Body Earthing Pit-2 1 (R < 0.5Ohm)	Not Ok
Building-2	Body Earthing Pit-1 (R < 0.5Ohm)	-
	Body Earthing Pit-2 1 (R < 0.5Ohm)	-
Building-3	Body Earthing Pit-1 (R < 0.5Ohm)	-
	Body Earthing Pit-2 1 (R < 0.5Ohm)	-

Details of Cables Used

Sr.	Observation	Please Mark/ Enter Relevant Block	Remarks
1	Solar DC Cable	UV Protected	Not Ok
2	Solar DC Cable	Multi stranded Tined Copper	Not Ok
3	Voltage Grade	600/ 1000 V	Not Ok
4	AC cable Insulation		XLPE
5	String Cable Size (mm2)		
6	AC Cable Sizes (mm2)		

Site Image 1 (PV Plant Photo):

Site Image 2 (With Consumer):

Note:

Observation and Conclusion

Sr.	Title	Remarks
1	PV Module complying IEC certificate - IEC 61215/ IS 14286, IEC 61853-I, IS 16170-I, IEC 61730, IEC 61701	
2	Module Protection - Min. IP 65	
3	Module Interconnection cable connectors are protected	
4	PV module are neat and clean	
5	PV Modules electrical connections are tight and secure	
6	Warranty of PV module - Min. 5 Years	
7	Structure Steel Thickness - Min. 2.5 MM	
8	Structure Properly Installed	
9	Structure Foundation grouting	
10	Fuse/MCB/ MCCB Protection	
11	Surge Protection device available	
12	DCDB Installed and mounted Properly	
13	Cables terminated properly through glands on gland plate	
14	MCB/ MCCB/RCCB Protection	
15	Surge Protection device available	
16	ACDB Installed Properly	
17	Cables terminated properly through glands on gland plate	
18	Inverter Efficiency - Minimum >95%	
19	Automatic Operation Including Wake-up, Synchronization And Shut Down	
20	Anti-islanding Protection	

Sr.	Title	Remarks
21	Built-in Meter And Data Logger - Monitoring plant performance through external computer	
22	Marking Of Inverter Capacity, Rating, Technical Specification - IEC 61727, IEC 61730, IEC 61683, IEC 60068-II (1,2,14,30)/ Equivalent BIS standard	
23	Inverter Properly Installed	
24	Cables Terminated Properly (Crimping And Lugging)	
25	DC Disconnect Available	
26	Terminal Earthing Effectively Earthed	
27	Building-1 - Body Earthing Pit-1 ($R < 0.5\Omega$)	
28	Building-1 - Body Earthing Pit-2 1 ($R < 0.5\Omega$)	
29	Solar DC Cable - UV Protected	
30	Solar DC Cable - Multi stranded Tinned Copper	
31	Voltage Grade - 600/ 1000 V	

Note:

It is certified the system is installed / not installed satisfactory and is found to be as per / not as per the specification of GEDA.