

SMARTER ENERGY SOLUTION

Preventive Maintenance Solar System



Customer Name : <u>Villa Saar</u>		Maintenance : <u>MA</u>	Date : <u>8 April 2025</u>
Solar Panel		Inverter	
Brand	Model	Capacity	Install
<u>Sonnax</u>	<u>SMX-D60HND-4800</u>	<u>400</u> kWp.	<u>62</u> Panels
Brand	Model	S/N	
<u>Solid</u>	<u>SG-GR20K</u>	<u>1811040244260122</u>	

Before Preventive Maintenance Solar System

Solar Panels	Operating Voltage / Current					Time	Inspection		Remark
String 1	Panels	Vmp <u>539.8</u>	Vdc	Voc <u>643.0</u>	Vdc	Isc <u>13.07</u> A.	<u>19:00</u>	☒ Pass	☐ Not Pass
String 2	Panels	Vmp <u>533.8</u>	Vdc	Voc <u>642.0</u>	Vdc	Isc <u>13.85</u> A.	:	☒ Pass	☐ Not Pass
String 3	Panels	Vmp <u>588.8</u>	Vdc	Voc <u>729.0</u>	Vdc	Isc <u>14.15</u> A.	:	☒ Pass	☐ Not Pass
String 4	Panels	Vmp <u>387.7</u>	Vdc	Voc <u>480.2</u>	Vdc	Isc <u>14.18</u> A.	:	☒ Pass	☐ Not Pass
String 5	Panels	Vmp	Vdc	Voc	Vdc	Isc A.	:	☐ Pass	☐ Not Pass
String 6	Panels	Vmp	Vdc	Voc	Vdc	Isc A.	:	☐ Pass	☐ Not Pass
String 7	Panels	Vmp	Vdc	Voc	Vdc	Isc A.	:	☐ Pass	☐ Not Pass
String 8	Panels	Vmp	Vdc	Voc	Vdc	Isc A.	:	☐ Pass	☐ Not Pass
String 9	Panels	Vmp	Vdc	Voc	Vdc	Isc A.	:	☐ Pass	☐ Not Pass
String 10	Panels	Vmp	Vdc	Voc	Vdc	Isc A.	:	☐ Pass	☐ Not Pass
String 11	Panels	Vmp	Vdc	Voc	Vdc	Isc A.	:	☐ Pass	☐ Not Pass
String 12	Panels	Vmp	Vdc	Voc	Vdc	Isc A.	:	☐ Pass	☐ Not Pass

After Preventive Maintenance Solar System

Solar Panels	Operating Voltage / Current					Time	Inspection		Remark
String 1	Panels	Vmp <u>593.5</u>	Vdc	Voc <u>697.3</u>	Vdc	Isc <u>12.67</u> A.	<u>19:30</u>	☒ Pass	☐ Not Pass
String 2	Panels	Vmp <u>520.7</u>	Vdc	Voc <u>699.0</u>	Vdc	Isc <u>13.91</u> A.	:	☒ Pass	☐ Not Pass
String 3	Panels	Vmp <u>582.4</u>	Vdc	Voc <u>798.4</u>	Vdc	Isc <u>13.98</u> A.	:	☒ Pass	☐ Not Pass
String 4	Panels	Vmp <u>397.1</u>	Vdc	Voc <u>497.1</u>	Vdc	Isc <u>13.76</u> A.	:	☒ Pass	☐ Not Pass
String 5	Panels	Vmp	Vdc	Voc	Vdc	Isc A.	:	☐ Pass	☐ Not Pass
String 6	Panels	Vmp	Vdc	Voc	Vdc	Isc A.	:	☐ Pass	☐ Not Pass
String 7	Panels	Vmp	Vdc	Voc	Vdc	Isc A.	:	☐ Pass	☐ Not Pass
String 8	Panels	Vmp	Vdc	Voc	Vdc	Isc A.	:	☐ Pass	☐ Not Pass
String 9	Panels	Vmp	Vdc	Voc	Vdc	Isc A.	:	☐ Pass	☐ Not Pass
String 10	Panels	Vmp	Vdc	Voc	Vdc	Isc A.	:	☐ Pass	☐ Not Pass
String 11	Panels	Vmp	Vdc	Voc	Vdc	Isc A.	:	☐ Pass	☐ Not Pass
String 12	Panels	Vmp	Vdc	Voc	Vdc	Isc A.	:	☐ Pass	☐ Not Pass

Inverter Inspection

Device	Field Measured Readings		Readings from Inverter Display		Readings from Smarter Meter		Field Measured Back Up	
Inverter	AC Line Voltage		AC Line Voltage		AC Line Voltage		AC Line Voltage	
	Phase L1 to Grd :	<u>228.7</u>	Vac.	Phase L1 to Grd :	<u>227.9</u>	Vac.	Phase L1 to Grd :	<u>228.7</u>
	Phase L2 to Grd :	<u>226.9</u>	Vac.	Phase L2 to Grd :	<u>227.2</u>	Vac.	Phase L2 to Grd :	<u>227.5</u>
	Phase L3 to Grd :	<u>230.8</u>	Vac.	Phase L3 to Grd :	<u>227.5</u>	Vac.	Phase L3 to Grd :	<u>230.3</u>
	AC Line Current		AC Line Current		AC Line Current			
	Phase L1 to Grd :	<u>36.84</u>	A.	Phase L1 to Grd :	<u>36.7</u>	A.	Phase L1 to Grd :	<u>37.10</u>
	Phase L2 to Grd :	<u>36.89</u>	A.	Phase L2 to Grd :	<u>35.9</u>	A.	Phase L2 to Grd :	<u>37.80</u>
	Phase L3 to Grd :	<u>37.91</u>	A.	Phase L3 to Grd :	<u>36.1</u>	A.	Phase L3 to Grd :	<u>36.00</u>

Comment :

Inspection By :

(Bunham Ubnoy) Project Engineer

Date : / /

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Electrical Room Inspection



Device	Ambient Temp	Temperature						Remark
Inverter	45.0 °C	Inside :	50.8 °C	Outside :	47.1 °C	Heatsync :	52.9 °C	
AC Cabinet	37.7 °C	MCB Breaker :	40.7 °C	RCCB Breaker :	37.9 °C	AC SPD :	37.2 °C	
			80 A.		80 A.		3 Phase	
		Smart Meter :	39.1 °C	AC Terminal	38.7 °C	CT Ratio :	/ A.	
			3 Phase	AC Cable :	25 Sq.m.	Meter Ratio :	A.	
		String No.	DC Fuse	DC Breaker	DC SPD	MC4 Connector		
DC Cabinet	40.4 °C	String 1	42.6 °C	49.7 °C	43.0 °C	38.0 °C		
		String 2	44.5 °C	45.4 °C	40.3 °C	39.2 °C		
		String 3	42.5 °C	45.3 °C	44.1 °C	39.4 °C		
		String 4	43.4 °C	46.9 °C	40.4 °C	40.7 °C		
		String 5	°C	°C	°C	°C		
		String 6	°C	°C	°C	°C		
		String 7	°C	°C	°C	°C		
		String 8	°C	°C	°C	°C		
		String 9	°C	°C	°C	°C		
		String 10	°C	°C	°C	°C		
		String 11	°C	°C	°C	°C		
		String 12	°C	°C	°C	°C		
EE Room	40.7 °C	AC Cable :	Sq.m.	Main Breaker :	290 A.	MCCB Feed :	A.	
		Wireway :	41.7 °C	MDB / LC :	42.8 °C		°C	

Comment :

Inspection By :

(Bunharn Libnoy)Project Engineer

Date : ____/____/____