Maintenance Report

SUNNY CENTRAL

Project name	**Customer:**
Address, location of the PV system	
Location label and serial number of MV station (if any):	
Location label and serial number of Sunny Central 1:	
Location label and serial number of Sunny Central 2 (if any):	

Content of the maintenance report

In conjunction with the other inverter documentation, the maintenance report assures faultless operation of the inverter and peripheral devices from SMA Solar Technology AG. Maintenance work does not automatically guarantee electrical safety.

The maintenance report contains all necessary Sunny Central maintenance intervals as well as the preventive replacement intervals of individual components.

Storage of the maintenance report

After maintenance work, the maintenance report remains in the Sunny Central.

Maintenance instructions

All steps of action listed in this protocol that are necessary for maintenance work are described in the maintenance manual.

Appendices

No.:	Appendix

1 Checklist of Maintenance Report

1.1 Sunny Central

No.	Maintenance work	Interval	OK
1.1.1	Read out the long-term data and error memory.	1 month* depending on the system size	
1.1.2	Clean or replace the filter pads in the air inlet filters.	24 months *	
1.1.3	Clean the insect guards at the air inlets and outlets.	24 months *	
1.1.4	Check inside of the switch cabinet, air ducts and EVR resistor for heavy dust deposits, dirt, moisture and water penetration from outside. If necessary, clean the Sunny Central and take suitable corrective measures.	24 months	
1.1.5	Check all power cable connections for looseness and tighten them if necessary. Check connectors and insulation for discoloration or degradation. Replace any damaged connectors or corroded contacts. Only tighten the aluminum clamp connections if they are loose.	24 months	
1.1.6	Visual inspection of winding materials Look for discolorations or deformations.	24 months	
1.1.7	Check all adhesive warning labels and replace them if necessary.	24 months	
1.1.8	Functional test of cooling fans and thermostats Check all cooling fans and thermostats for functionality and operating noise. The fans can be switched on by adjusting the thermostats. If present: cabinet fan, heat sink fan(s), internal circulation fan(s), diode fan, heating fan, cooling fans of heat exchanger	24 months	
1.1.9	Functional test of heater	24 months	
1.1.10	Functional test of all protective equipment present Residual-current device Miniature circuit breaker Circuit breaker Motor protection circuit breaker	24 months	

No.	Maintenance work	Interval	OK
1.1.11	Visually check all fuses and disconnectors. Clean and lubricate the contacts if necessary.	24 months	
1.1.12	Check surge arrester	24 months	
1.1.13	Check of control voltage and auxiliary voltage 230 V and 24 V	24 months	
1.1.14	Functional test overtemperature Check overtemperature safety circuit.	24 months	
1.1.15	Functional test emergency switch Check function of internal and external emergency switches.	24 months	
1.1.16	Functional test of the door contacts	24 months	
1.1.17	Functional test of ABB high-performance circuit breaker / GFDI/ soft grounding Check function and signal.	24 months	
1.1.18	Check covers and function of locks.	24 months	
1.1.19	Sunny Central 100 outdoor Check intermediate space of roof and exhaust air area in the base.	24 months	
1.1.20	Check concrete station-cellar and air ducts. Is there a filter in the door?	24 months	

* The maintenance interval may need to be reduced, depending on the location or ambient conditions.

Regular data backup

Back up and archive the data of Sunny Central Control (e.g. with Sunny Data Control) at regular intervals. This can be done by remote query or during routine maintenance work.

1.2 SSM - Sunny String-Monitor

No.	Maintenance work	Interval	OK
1.2.1	Check all power cable connections for looseness and tighten them if necessary. Check connectors and insulation for discoloration or degradation. Replace any damaged connectors or corroded contacts.	24 months	
1.2.2	Check all string cable connections for looseness and replace them if necessary. Check insulation, and the terminals on the assembly resp. on the busbar for discoloration or degradation.	24 months	
1.2.3	Check all cable connections of the optional DC main switch for looseness and tighten them if necessary. Check insulation and switch for discoloration or degradation.	24 months	

No.	Maintenance work	Interval	OK
1.2.4	Check attachment of the Sunny String-Monitor, i.e. horizontal installation.	24 months	
1.2.5	Check lid fasteners.	24 months	
1.2.6	Check screw connections for tightness and possible replacement if necessary.	24 months	
1.2.7	Check whether there is condensation water in the device	24 months	
1.2.8	Check shield connection.	24 months	
1.2.9	Check ground connection resp. contact resistance to the grounding electrode.	24 months	
1.2.10	Check vent plug for contamination and replace it if necessary.	24 months	
1.2.11	Check installation site for accessibility, inflammable materials and safe positioning.	24 months	
1.2.12	Check attachments of Plexiglas covers.	24 months	
1.2.13	Check adhesive warning labels and replace them if necessary.	24 months	
1.2.14	Visually check existing fuses and tension springs on the fuse holders.	24 months	
1.2.15	Check surge arrester	24 months	
1.2.16	Check auxiliary voltage +55 V DC at terminals.	24 months	

1.3 SSM-C - Sunny String-Monitor Cabinet

No.	Maintenance work	Interval	OK
1.3.1	Check all power cable connections for looseness and tighten them if necessary. Check connectors and insulation for discoloration or degradation. Replace any damaged connectors or corroded contacts.	24 months	
1.3.2	Check all string cable connections for looseness and replace them if necessary. Check insulation, the disconnectors, the assembly, and busbars for discoloration or degradation.	24 months	
1.3.3	Check all cable connections of the optional DC main switch for looseness and tighten them if necessary. Check insulation and switch for discoloration or degradation.	24 months	
1.3.4	Check entries of the connection cables for tightness.	24 months	

No.	Maintenance work	Interval	OK
1.3.5	Check whether there is condensation water in the device	24 months	
1.3.6	Check shield connection.	24 months	
1.3.7	Check ground connection resp. contact resistance to the grounding electrode.	24 months	
1.3.8	Check filter material for contamination and replace it if necessary	24 months	
1.3.9	Check installation site for accessibility and safe positioning. Open the upper front plate.	24 months	
1.3.10	Check attachments of Plexiglas covers.	24 months	
1.3.11	Check adhesive warning labels and replace them if necessary.	24 months	
1.3.12	Visually check existing fuses and tension springs on the fuse holders.	24 months	
1.3.13	Check surge arrester.	24 months	
1.3.14	Check auxiliary voltage +55 V DC at terminals.	24 months	

1.4 SMB(-C) - Sunny Main Box (Cabinet)

No.	Maintenance work	Interval	OK
1.4.1	Check all string cable connections for looseness and replace them if necessary. Check insulation, the disconnectors, the assembly, and busbars for discoloration or degradation.	24 months	
1.4.2	Check entries of the connection cables for tightness.	24 months	
1.4.3	Check whether there is condensation water in the device	24 months	
1.4.4	Check adhesive warning labels and replace them if necessary.	24 months	
1.4.5	Check attachment of the SMB, i.e. horizontal installation.	24 months	
1.4.6	Check filter material for contamination and replace it if necessary	24 months	
1.4.7	Check installation site for accessibility, inflammable materials and safe positioning.	24 months	

2 Report of the Preventive Replacement Intervals

No.	Replacement parts	Replacement intervals	OK
2.1.1	Fan at Sunny Central Control (if any)	48 months	
2.1.2	GFDI/ soft grounding / ABB high-performance circuit breaker	After 100 trippings	
2.1.3	Heat sink fan(s), cabinet fan(s), internal circulation fan(s), heating fan, diode fan, and cooling fans of heat exchanger	10 years	
2.1.4	Surge arrester • DEHNguard • BLITZDUCTOR	 • If tripped. • If not within the tolerance range.	
2.1.5	Battery on Sunny Central Control (only with SCC03 and SCC04)	8 years	
2.1.6	Buffer module 24 V (if any)	10 years	
2.1.7	Relay K100 (if any)	10 years	

Your signature confirms that the work listed above has been carried out.

Customer or contractor company (in block letters)	Last name, first name (in block letters)	Date	Signature