COMPLIANCE

VERIFICATION OF COMPLIANCE

No.:	SHES2508015234PV
Applicant:	NeoVolta Inc. 12195 Dearborn Place, 92064, Poway, California, United States of America
Manufacturer:	NeoVolta Inc. 12195 Dearborn Place, 92064, Poway, California, United States of America
Product Name:	Hybrid Solar Inverter
Product Description:	Hybrid Solar Inverter
Model No.:	NV12KAC, NV16KAC
Trade Mark:	NEOVOLTA
Rating:	See page 2
Protection against Electric Shock:	--
Additional Information (if any):	Firmware version: Ver 1.0406(DSP), Ver 2.0306(ARM)

Sufficient samples of the product have been tested and found to be in conformity with

Test Standard:	See page 3
as shown in the	
Test Report Number(s):	SHES250801523401

This Verification of Compliance has been granted to the applicant based on the results of tests, performed by Laboratory of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. on sample of the above-mentioned product in accordance with the provisions of the relevant specific standards.

Van Hua
Technical Manager
SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

2025-08-18

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Other information added:

Rating:

Model:	**NV12KAC**	NV16KAC
INPUT RATINGS:		
Maximum input voltage	500 V dc	
Range of input operating voltage (without Battery)	120 V dc to 500 V dc	120 V dc to 500 V dc
Range of input operating voltage (with Battery)	120V dc to 430 V dc	120V dc to 430 V dc
Maximum input current (dc)	16A/16A/16A/16A	20A/20A/20A/20A
Number of input	4	
OUTPUT RATINGS:		
Output power factor rating	default >0.99 (-0.8~0.8 adjustable)	
Operating voltage range (ac) (L-L)	0.88Un~1.1Un	
Operating frequency range or single frequency	58.5 Hz to 61.2 Hz	
Number of phases	Single phase/ Split phase	
Nominal output voltage (ac)	120Vac/240Vac	
Normal output frequency	60 Hz	
Maximum continuous output current (ac) per line	55.0 Arms	73.3 Arms
Rated output current (ac) per line	55.0 Arms	66.7 Arms
Maximum continuous output power (ac)	13.2 kVA	17.6 kVA
Rated continuous output power (ac)	12.0 kW	16.0 kW
Maximum output fault current (ac) and duration	378Apk, 83ms, 71.1 Arms@1cycle; 97.7 Arms@3cycle; 97.7 Arms@5cycle	
Trip limit and trip time accuracy - Voltage:	±2.4 V	±2.4 V
Utility interconnection voltage and frequency trip limits and trip times	see Note 1 and 2	
Trip limit and trip time accuracy - Frequency:	±0.01 Hz	
Trip limit and trip time accuracy - Time	±1%setting, but not less than 50ms	
Normal operation temperature range	-25ºC to 60ºC	
Enclosure Rating Type	Type 3R	
Weigh (kg)	56kg	56kg
Dimension (mm)	495*900*260	
OUTPUT RATINGS (BACKUP output terminal):		
Number of phases	Single phase/Split phase	
Nominal output voltage (ac)	120Vac/240Vac	
Normal output frequency	60 Hz	
Maximum continuous output power (ac)	13.2kVA	13.2 kVA
Rated output power (ac)	12.0 kW	13.0 kW
Battery terminal, Bi-directional:		
Battery Type	Lithium/Lead acid	
Range of DC operating voltage (Vdc)	40-58V dc	
Nominal voltage (Vdc)	48V dc	
Max. charging/ discharging current (Adc)	250/260 Arms	260/280 Arms
Max. charging/ discharging power (W)	12000W	16000W

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Other information added:

As the gateway used by customer is certified by SunSpec, the compatibility testing is as part of IEEE2030.5 conformance testing of the gateway. According to the Resolution E-5000 & E-5036, for inverters that do not directly implement IEEE 2030.5 client functionality, the following five test cases according to SunSpec CSIP test procedures on the gateway while it is connected to the inverter.

1) Inverter Status (BASIC-028)
2) Inverter Meter Reading (BASIC-029)
3) Basic Inverter Control – Volt/Var (BASIC-006)
4) Basic Inverter Control – Fixed Power Factor (BASIC-008)
5) Basic Inverter Control – Volt-Watt (BASIC-011)

The test was conducted using the QualityLogic IEEE 2030.5 Test Harness which implements the test cases that are described in the CSIP Test Procedures document.

The inverter under test was subjected to testing conditions as follows:

- ✓ The inverter was operating during test harness verification procedure.
- ✓ The gateway was given orders as IEEE 2030.5 commands (Inverter Status, Inverter Meter Reading, Volt/VAR, Fixed Power Factor, and Volt/Watt) sent from an IEEE 2030.5 Client FTS that were subsequently translated to signals understood by the inverter.
- ✓ The inverter parameters were verified:

a) to change during the test cases for Volt-VAR, Fixed Power Factor, and Volt-Watt and b) report monitored data during the test cases for Inverter Status and Inverter Meter Reading. Based on this procedure, the requirements from Appendix C of the resolution were verified.

Test Name	Test Description	Result
BASIC-006	Basic Inverter Control (Volt/Var) [C, A, S]	Pass
BASIC-008	Basic Inverter Control (Fixed Power Factor) [C, A, S]	Pass
BASIC-011	Basic Inverter Control (Volt-Watt) [C, A, S]	Pass
BASIC-028	Inverter Status [C, A, S]	Pass
BASIC-029	Inverter Meter Reading [C, A, S]	Pass

Test Standard: California Public Utilities Commission Resolution E-5000 & E-5036
Common Smart Inverter Profile V2.1

Test procedure: Common Smart Inverter Profile (CSIP) Conformance Test Procedures V1.2

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