

# Certificate of Conformity

Certificate Number: CN-PV-230561

On the basis of the tests undertaken, the sample<s> of the below product have been found to comply with the requirements of the referenced specification<s>/standard<s> at the time the tests were carried out. It does not imply that Intertek has performed any surveillance or control of the manufacture(s). The manufacturer(s) shall ensure that the manufacturing process assures compliance of the production units with the examined products mentioned in this certificate.

**Applicant:** Elmark Industries SC

2 Dobrudzha blvd., 9300, Dobrich, Bulgaria

**Product:** Grid-connected PV inverter

Ratings & Principle Characteristics:

See appendix of Certificate of Conformity

Model: ELM1PON3000, ELM1PON3600-1, ELM1PON3600, ELM1PON4000,

ELM1PON5000, ELM1PON6000, ELM1PON7000, ELM1PON8000

ELMARK
Brand Name<s>:

**Product Complies with:** EN 50549-1:2019 Requirements for the connection of generation equipment

in parallel with public distribution networks.

**Certificate Issuing Office** 

Name & Address:

Intertek Testing Services Ltd. Shanghai

West Area, 2<sup>nd</sup> Floor, No. 707, Zhangyang Road

China (Shanghai) Pilot Free Trade Zone, Shanghai, P. R. China

Accredited by ACCREDIA in accordance with ISO/IEC 17065:2012

Test Report No.<s>: 2308A0286SHA-001

Additional information in Appendix.

Signature

**Certification Manager: Qiao Qiao** 

Date: 28 September 2023

ACCREDIA 5

PRD N° 306B

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## **APPENDIX: Certificate of Conformity**

This is an Appendix to Certificate of Conformity Number: CN-PV-230561

### Ratings & Principle Characteristics:

| Specifications table            |                                |                             |                            |                            |  |  |
|---------------------------------|--------------------------------|-----------------------------|----------------------------|----------------------------|--|--|
| Model                           | ELM1PON3000                    | ELM1PON3600-<br>1           | ELM1PON3600                | ELM1PON4000                |  |  |
| Input:                          |                                |                             |                            |                            |  |  |
| Vmax PV (Vdc)                   | 600                            | 600                         | 600                        | 600                        |  |  |
| Isc PV (absolute Max.) (A)      | 18*2                           | 18                          | 18*2                       | 18*2                       |  |  |
| Number MPP trackers             | 2                              | 1                           | 2                          | 2                          |  |  |
| Number input strings            | 1/1                            | 1                           | 1/1                        | 1/1                        |  |  |
| Max. PV input current(A)        | 14*2                           | 14                          | 14*2                       | 14*2                       |  |  |
| MPPT voltage range (Vdc)        | 70-550                         | 70-550                      | 70-550                     | 70-550                     |  |  |
| Vdc range @ full power<br>(Vdc) | 110-550                        | 265-550                     | 130-550                    | 145-550                    |  |  |
| Output                          |                                |                             |                            |                            |  |  |
| Normal Voltage(V)               | L/N/PE 220Vac, 230Vac, 240Vac  |                             |                            |                            |  |  |
| Frequency(Hz)                   | 50 Hz/60 Hz                    |                             |                            |                            |  |  |
| Current (normal) (A)            | 13.1                           | 15.7                        | 15.7                       | 17.4                       |  |  |
| Current (Max. continuous) (A)   | 15                             | 17.5                        | 17.5                       | 20                         |  |  |
| Power rating (W)                | 3000                           | 3600                        | 3600                       | 4000                       |  |  |
| Power Rating(VA)                | 3000                           | 3600                        | 3600                       | 4000                       |  |  |
| Power factor /rated             | 1(-0.8~+0.8<br>adjustable )    | 1(-0.8~+0.8<br>adjustable ) | 1(-0.8~+0.8<br>adjustable) | 1(-0.8~+0.8<br>adjustable) |  |  |
| others                          |                                |                             |                            |                            |  |  |
| Protective class                | Class I                        |                             |                            |                            |  |  |
| Ingress protection (IP)         | IP 65                          |                             |                            |                            |  |  |
| $Temperature({}^{}\mathbb{C})$  | -25℃ to +60℃ (up 45℃ derating) |                             |                            |                            |  |  |
| Inverter Isolation              | Non-isolated                   |                             |                            |                            |  |  |
| Software version:               | DSP: V06 CPLD: V06 HMI: V06    |                             |                            |                            |  |  |

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## **APPENDIX: Certificate of Conformity**

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### Ratings & Principle Characteristics:

| Specifications table                |                               |                             |                            |                            |  |  |
|-------------------------------------|-------------------------------|-----------------------------|----------------------------|----------------------------|--|--|
| Model                               | ELM1PON5000                   | ELM1PON6000                 | ELM1PON7000                | ELM1PON8000                |  |  |
| Input:                              |                               |                             |                            |                            |  |  |
| Vmax PV (Vdc)                       | 600                           | 600                         | 600                        | 600                        |  |  |
| Isc PV (absolute Max.) (A)          | 18*2                          | 18*2                        | 18+35                      | 18+35                      |  |  |
| Number MPP trackers                 | 2                             | 2                           | 2                          | 2                          |  |  |
| Number input strings                | 1/1                           | 1/1                         | 1/2                        | 1/2                        |  |  |
| Max. PV input current(A)            | 14*2                          | 14*2                        | 13+26                      | 13+26                      |  |  |
| MPPT voltage range (Vdc)            | 70-550                        | 70-550                      | 70-550                     | 70-550                     |  |  |
| Vdc range @ full power<br>(Vdc)     | 180-550                       | 220-550                     | 220-550                    | 220-550                    |  |  |
| Output                              |                               |                             |                            |                            |  |  |
| Normal Voltage(V)                   | L/N/PE 220Vac, 230Vac, 240Vac |                             |                            |                            |  |  |
| Frequency(Hz)                       | 50 Hz/60 Hz                   |                             |                            |                            |  |  |
| Current (normal) (A)                | 21.8                          | 26.1                        | 30.5                       | 34.8                       |  |  |
| Current (Max. continuous) (A)       | 24                            | 28.7                        | 33.6                       | 38.3                       |  |  |
| Power rating (W)                    | 5000                          | 6000                        | 7000                       | 8000                       |  |  |
| Power Rating(VA)                    | 5000                          | 6000                        | 7000                       | 8000                       |  |  |
| Power factor /rated                 | 1(-0.8~+0.8<br>adjustable)    | 1(-0.8~+0.8<br>adjustable ) | 1(-0.8~+0.8<br>adjustable) | 1(-0.8~+0.8<br>adjustable) |  |  |
| others                              |                               |                             |                            |                            |  |  |
| Protective class                    | Class I                       |                             |                            |                            |  |  |
| Ingress protection (IP)             | IP 65                         |                             |                            |                            |  |  |
| $Temperature(^{\circ}\!\mathbb{C})$ | -25℃ to +60℃(up 45℃ derating) |                             |                            |                            |  |  |
| Inverter Isolation                  | Non-isolated                  |                             |                            |                            |  |  |
| Software version:                   | DSP: V06 CPLD: V06 HMI: V06   |                             |                            |                            |  |  |

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