# **CERTIFICATE OF SUITABILITY**

Authorised marking: TUV-028502-E

TÜV Rheinland Australia Pty Ltd "Electrical Product Safety Certification (EPSC) Scheme", accredited by JAS-ANZ in accordance with ISO/IEC 17065, has issued this certificate under JAS-ANZ accreditation. The electrical equipment described hereunder has been evaluated and complied with the standard(s) listed below in accordance with the scheme herein and met the minimum safety requirements contained in Australian Standard AS/NZS 3820 as of current. It is a requirement that all equipment supplied under this certificate shall be identical to the equipment as certified.

CERTIFICATE HOLDER: Entelar Group Limited

19 Gabador Place, Mount Wellington,

1060 Auckland New Zealand

## **DESCRIPTION OF ELECTRICAL EQUIPMENT**

Declared class:

Product:

Trade Name /

Non-declared

SOLAR INVERTER

entelar energy

Manufacturer:

Model Number: EESOLAR-10KTL-LC0

Ratings: Ratings refer to Continuation Sheet 1 for details

Condition(s): N/A

**Standard:** AS/NZS 4777.2:2020+A1

IEC 62109-2:2011 IEC 62109-1:2010

**Issue Date:** 09-07-2025 **Expiry Date:** 09-07-2030

Signed for and on behalf of TÜV Rheinland Australia Pty Ltd

John Wang

www.jas-anz.org/register

TÜVRheinland

Precisely Right.

TÜV Rheinland Australia Pty Ltd 182 Dougharty Road, Heidelberg West, VIC 3081 Phone: +61 (3) 9450 1400

Email: <a href="mailto:certification@au.tuv.com">certification@au.tuv.com</a>
Website: <a href="mailto:www.au.tuv.com">www.au.tuv.com</a>
www.tuv.com

## **CONTINUATION SHEET 1**

**Description of Equipment** 

Ratings:

For all models:

Protection: Class I, IP66, PD3

Operating Temp.: -25°C to 60°C (>45°C derating)

Overvoltage Category (OVC): III for AC side, II for DC side

Inverter Topology: Non-isolated Firmware version: V100R023

PV input: Vmax: 600Vdc VMPP: 40V-560Vdc Isc: 20/20/20A Imax: 16/16/16A AC output:

Rated output voltage: 220/230/240Vac (L+N+PE),

Rated output frequency: 50/60Hz Rated output Apparent power: 10000 VA Max. output Apparent power: 10000 VA

Rated output Power: 10000 W Max. output Power: 10000 W

Rated output Current: 45.5A@220 V, 43.5A@230 V, 41.7A@240 V

Max. output current: 45.5A

Power factor: 0.8 leading to 0.8 lagging

**Issue Date:** 09-07-2025 **Expiry Date:** 09-07-2030

Signed for and on behalf of TÜV Rheinland Australia Pty Ltd

John Wang

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Website: www.au.tuv.com



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# **CERTIFICATE OF SUITABILITY**

## **CONTINUATION SHEET 2**

**Description of Equipment** 

Back-up Output

Rated Output Voltage: 220/230/240Vac

Rated Output Current: 45.5A@220 V, 43.5A@230 V, 41.7A@240 V

Rated Output Frequency: 50/60Hz Rated Apparent Power: 10000VA

Battery:

Battery type: Li-ion

Battery Input voltage range: 350-600Vdc

Battery Max. Charge/Discharge current: 25/25Adc

**Issue Date:** 09-07-2025 **Expiry Date:** 09-07-2030

Signed for and on behalf of TÜV Rheinland Australia Pty Ltd

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Certificate Number:

AZ 69027897

Page: 0005



# **CERTIFICATE OF APPROVAL**

Authorised marking: TUV-027897-EA

**CONTINUATION SHEET 4** 

(Modification 2)

Add alternative inverters:

Classified as:

Installed within power conditioning equipment (PCE), enclosed outdoor, suitable for installation exposed to sunlight as per AS/NZS 5033.

Switch arrangement: Ex9IRN40-50/06/PV2/4, 4 layers

Installed within Solar Inverter

Ithe Solar at 40°C: 48A, Ithe Solar at 60°C: 48A

Brand: Entelar Energy

Models: EESOLAR-10KTL-LC0

Size: 425mm×365mm×130mm (W x H x D)

Enclosure material: AL5052

Issue Date: 07/11/2024

Expiry Date: 02/04/2029

Signed for and on behalf of TÜV Rheinland Australia Pty Ltd

John Wang

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# SUPPLIER DECLARATION OF CONFORMITY (SDoC)

In accordance with ISO/IEC 17050-1:2004

SDoC Identification Number¹: EGPV-EESOLAR-10KTL-LC0						
Issuer details						
Name² (of New Zealand manufacturer or importer):  [Entelar Group Limited]  Telephone: 0800 8353447 Opt 4  New Zealand Company No. (if applicable): 9429050709007  Email Address: entelarenergyhelpdesk@entelargroup.co.nz	Contact Address:  Entelar Group Limited 19 Gabador Place, Mount Wellington 1060 Auckland New Zealand					
Medium Risk Article – Details <sup>3</sup> (Product name, type, rating, brand, model, batch numbers, and serial numbers, as applicable):						
Product name: Solar Inverter Single phase 50Hz Product series: EESOLAR-10KTL-LC0 (see attached list)						
The Medium Risk Article listed above, fully complies:						
With cited standard(s), as listed <sup>4</sup> :  Standard number and issue year:  Edition / Amendment status:  Standard title:  Essential Safety Requirements for Electrical Equipment	Standard number and issue year:  Edition / Amendment status:  Standard title:					
AS/NZS ZZ modified Yes □ No □ N/A ■	AS/NZS ZZ modified Yes □ No □ N/A ■					
OR Complies with the Conformity Cooperation Agreement (CCA) <sup>5</sup> OR is registered on the EESS database & the declarer is registered as the responsible of the EESS database and Evaluating/Testing/Certification  Name(s):  TUV Rheinland Australia Pty Ltd.  Address(es):  Address(es):	· · · · · · · · · · · · · · · · · · ·					
Reference to relevant test reports/certification and the issue	date that show how compliance is achieved					
Supporting document(s) used, to show how compliance with the declared standard(s) is achieved or CCA certification:  Certificate: AS/NZS 4777.2:2020+A1, IEC 62109-2:2011, IEL 62109-1:2010	Report Certification or Document reference N°(s):  AZ 69028502    09/07/2025					
Reference to any management quality system involved:  Additional information <sup>7</sup> :						
Declaration (signed for and on behalf of):-						
Name and position as authorised by the issuer*:  Laura Dewar, Entelar Energy Lead  Issuer Identification (as affixed to the article):	Signature:  Date:					
	10 July 2025					

# SUPPLIER DECLARATION OF CONFORMITY (SDOC) In accordance with ISO/IEC 17050-1:2004

Technical Specification	EESOLAR-10KTL-LC0	
	Efficiency	
Max. efficiency	98.1%	
European weighted efficiency	97.5%	
	Input (PV)	
Recommended max. PV power 1	15,000 Wp	
Max. input voltage	600 V	
Startup voltage	50 V	
MPPT operating voltage range	40 ~ 560 V	
Rated input voltage	360 V	
Max. input current per MPPT	16 A	
Max. short-circuit current		
	20 A	
Max. number of inputs	3	
Number of MPP trackers	3	
	Input (DC Battery)	
Compatible battery	EESTORE Battery System 5kWh – 30kWh	
Operating voltage range	350 ~ 560 Vdc	
Max. operating current	25 A	
Max. charge power	10,000 W	
Max. discharge power	10,000 W	
	Output (On Grid)	
Grid connection	Single-phase	
Rated output power	10,000 W	
Max. apparent power	10,000 VA	
Rated output voltage		
	220 Vac / 230 Vac / 240 Vac, L / N + PE	
Max. output current	45.5 A	
Rated AC grid frequency	50 Hz/60 Hz	
Adjustable power factor	0.8 leading0.8 lagging	
Max. total harmonic distortion	≤ 3%	
Backup power output	Yes (via compatible Backup Box)	
	Features & Protection	
Anti-islanding protection	Yes	
DC reverse polarity protection	Yes	
Insulation monitoring	Yes	
DC surge protection	Yes, compatible with TYPE II protection class according to EN/IEC 61643-17	
AC surge protection	Yes, compatible with TYPE II protection class according to EN/IEC 61643-1	
Residual current monitoring unit	Yes	
AC overcurrent protection	Yes	
AC short-circuit protection	Yes	
AC overvoltage protection	Yes	
Over-heat protection	Yes	
Arc fault protection	Yes	
Battery charging from grid	Yes	
	General Data	
Operating temperature range	-25°C to +60°C (-13 °F ~ 140 °F)	
Relative operating humidity	0%-100% RH	
Operating altitude	0-4,000 m (Derating above 2,000 m)	
Cooling	Smart Air Cooling	
Display	LED indicators; integrated WLAN + App	
Communication	RS485, WLAN / Ethernet via EEDongleA-05	
Weight	15 kg	
Dimensions (W x H x D) (incl. mounting plate)		
	425 mm x 376.5 mm x 150 mm	
Degree of protection	IP66	
	Optimizer Compatibility	
Compatible optimizer	SUN2000-450W-P2, SUN2000-600W-P	
	Standards Compliance (More Available Upon Request)	
Safaty	RCM, IEC 62109-1&2, AS/NZS 60947.3:2015	
Safety Crid connection standards		
Grid connection standards	AS/NZS 4777.2:2020, AS/NZS 4777.2:2015	

## Supplier Declaration of Conformity (SDoC)

In accordance with ISO/IEC 17050-1:2004

#### Notes for completion

- 1. Every declaration of conformity should be uniquely identified.
- 2. The responsible issuer must be unequivocally specified and either be the NZ manufacturer or the importer (NZ).
- 3. The "Article" must be adequately described so that the declaration of conformity may uniquely be related to the declared article in question. For mass-produced-products, it is not necessary to give individual serial numbers. Where variants of an article are to be covered, these must be fully detailed.
- 4. The cited standard is the applicable specific safety standard exactly as it is cited in <u>Schedule 4 of the Electricity (Safety) Regulations 2010</u> or AS/NZS 3820, at the date that the declaration is signed. Where compliance with the AS/NZS 3820 is claimed, a supporting document will be required that shows how each clause of the AS/NZS 3820 standard is complied with.
- 5. This is for products imported and offered for sale under the explicit control of the China "Conformity Cooperation Agreement" such product will be marked in accordance with that agreement and NZ suppliers of such product should obtain documentary evidence to support any claim that a product is covered by that agreement. Warning a product offered for sale that is marked in accordance with the CCA, that is not actually covered by the CCA is illegal and subject to a fixed Infringement Fee fine. No details of any cited safety standards are required on the declaration.
- 6. The Electrical Equipment Safety Scheme (EESS) registration can be checked at the following link <a href="https://equipment.erac.gov.aw/Registration/EquipmentSearch.aspx?atn=public">https://equipment.erac.gov.aw/Registration/EquipmentSearch.aspx?atn=public</a>. Consumers can just enter the EESS equipment number on the database to check the registration and registered supplier of that equipment. The product declared must exactly match the details listed on that database and the NZ declarer must be the named Responsible or Affiliated supplier registered for the specific product. No details of any cited safety standards are required on the declaration. (Note: If registered as previously described, completion of the SDoC is entirely voluntary, as Regulation 83A recognises EESS registration directly.)
- 7. Text should appear here only if any limitation on the validity of the declaration of conformity and/or any additional information are given.
- 8. Full name and function of the signing person(s) authorised by the issuer's management to sign on its behalf should be given. The number of signatures, or equivalent, included will be the minimum determined by the legal form of the issuer's organisation.

### Continuing validity of the declaration of conformity

The issuer of the declaration of conformity shall have adequate procedures in place to ensure the continued conformity of the declared medium risk article, as delivered or accepted, with the stated requirements of the declaration of conformity.

The issuer of the declaration of conformity should have procedures in place to continually evaluate the validity of the declaration of conformity, in respect of the product declared, in the event of:-

- a) Changes significantly affecting the article design or specification by the manufacturer?; and/or
- b) Being aware of relevant information indicating that the article may no longer conform to the specified requirements?; and/or
- c) Change of product manufacturer or structure of management of the product manufacturer?; and/or
- d) Change of supply of any critical safety or protective components?; and/or
- e) Changes to the safety standards cited in Regulations, for product imported / NZ manufactured, after the new citation take effect? (Note: This does not apply to equipment imported under the CCA or currently registered on EESS by the NZ supplier, where the continued validity is governed by other rules.)

## Additional information regarding the declaration

Although not required by the ISO/IEC 17050, "Issuer Identification" affixed to the article: this marking should identify the issuer of the SDoC and may be for example in the form of a NZ GST N°, NZ Company N°, or Unique NZ brand name or trademark, etc. Failure to mark a product with such unique identification may result in the issuer being held responsible for compliance of an article that may not have been supplied by the issuer, unless the issuer can prove otherwise! This is particularly relevant where the same or very similar model, may be imported by other NZ suppliers and is perhaps not compliant.

A copy of the SDoC and test report(s) (certification) and/or other supporting compliance documentation must be available, if the supporting compliance documentation is not available directly from issuer, the name and address of from where it can be obtained from, must be provided by any supplier within the New Zealand supply chain. (Note: A copy of the SDoC and supporting documentation must be available within 10 working days after being asked to do so by Energy Safety, also a copy of the SDoC (only) must be provided within 10 days of request by a purchaser or potential purchaser, of the article declared).

A person who sells or offers for sale, a declared medium risk article commits an offence, if at the time of sale or offer to sell, a valid declaration of conformity for the article has not been made, or the person cannot provide a copy of the declaration of conformity, along with the required supporting documentation, within the timeframe allowed. Penalties associated with a grade "A" offence are fines, not exceeding \$10,000 for an individual or \$50,000 for a body corporate (company) if successfully prosecuted, or a fixed infringement fee, of \$1,000 for an individual or \$3,000 for a body corporate (company).

See <u>listings of the current regulatory definitions for electrical equipment deemed to be medium risk articles</u>, on the Energy Safety website <u>www.energysafety.govt.nz</u>.

This form can be edited to increase any text box size, in order to insert more detail, than the current space allows, if required.

This is an example ISO/IEC 17050-1 form for a recognised declaration of conformity; any other form complying with the requirements of ISO/IEC 17050-1:2004, may be used instead, for the purpose of Electricity Regulation 83.

Nothing prevents this form being extended to act as an SDoC, for other regulatory purposes.

This completed form remains with the issuer as part of the documentation required as evidence of compliance DO NOT submit a copy of this form to Energy Safety unless specifically requested to do so.

# RADIO SPECTRUM MANAGEMENT

Signature of supplier/agent:

28/2/2024

Date:



# Supplier's Declaration of Conformity

Section 134 (1) (g) of the New Zealand Radiocommunications Act 1989

Note | This completed form remains with the supplier as part of the documentation required for the "Compliance folder"

Name (of manufacturer, importer or authorised agent): Entelar Group Ltd.		New Zealand physical address: 19 Gabador Place, Mount Wellingtion, Auckland 1060, New Zealand		
New Zealand contact information:		New Zealand postal address (if different):		
Telephone: +64 800 835 3447				
Mobile:				
Fax:				
Email: support@entelargrou	p.co.nz			
(New Zealand) Company number or GST number:		ERAC Supplier Number:		
9429050709007		E10442		
2. Product details  Brand name:	Entelar Energy			
Model, lot, batch or serial number:	EESOLAR-10KTL-LC0			
Description and function:	Solar Inverter			
If radio product:	Frequency or frequency range (MHz): 2412-2472MHZ		Radiated power e.i.r.p (dBW): 19.5dBm	
	CISPR 11:2015+A1:2016(Group 1), AS/NZS 4268:2017, AS/NZS 2772.2:2016			
Applicable standard title, number & edition:	CISPR 11:2015+A1:20	(		
Applicable standard title, number & edition:  Test report number or other identifier:		01R, ENS2402050001W00	102R, 68.760.24.0126.01	

Print name: Laura Dewar

Position in organisation:

Commercial & Logistics Lead