Certificate Number: **AZ 69028505** **Page:** **0001**

CERTIFICATE OF SUITABILITY

Authorised marking: TUV-028505-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:	Non-declared
Product:	SOLAR INVERTER
Trade Name / Manufacturer:	entelar energy
Model Number:	EESOLAR-20KTL-MB0
Ratings:	Ratings refer to Continuation Sheet 1 to 2for 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

® TÜV, TUEV and TUV are registered trademarks . Utilisatio n and applic ation requires prior approval.

TÜV Rheinland Australia Pty Ltd
182 Dougharty Road, Heidelberg West, VIC 3081
Phone: +61 (3) 9450 1400
Email: certification@au.tuv.com
Website: www.au.tuv.com
www.tuv.com

www.jas-anz.org/register

TÜVRheinland®
Precisely Right.

CERTIFICATE OF SUITABILITY

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:V200R023
PV input:
Vmax:1100Vdc
VMPP:200V-1000Vdc
Isc:40/40A
Imax:30/30A
AC output:
Rated output voltage:220/380, 230/400, 240/415, 3(N)~+PE
Rated output frequency:50/60Hz
Rated output Apparent power:20000 VA
Max. output Apparent power:20000 VA
Rated output Power:20000 W
Max. output Power:22000 W
Rated output Current:30.4A (220/380V) / 28.9A (230/400V) /27.8A(240/415V)
Max. output current:33.6A (220/380V) / 31.9A (230/400V)/ 30.8A(240/415V)
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

® TÜV, TUEV and TUV are registered trademarks . Utilisation and application requires prior approval.

TÜV Rheinland Australia Pty Ltd
182 Dougharty Road, Heidelberg West, VIC 3081
Phone: +61 (3) 9450 1400
Email: certification@au.tuv.com
Website: www.au.tuv.com
www.tuv.com

www.jas-anz.org/register

TÜVRheinland®
Precisely Right.

CERTIFICATE OF SUITABILITY

CONTINUATION SHEET 2

Description of Equipment
Back-up Output
Rated Output Voltage: 220/380, 230/400, 240/415Vac
Rated Output Current: 30.4A (220/380V) / 28.9A (230/400V) /27.8A(240/415V)
Rated Output Frequency:50/60Hz
Rated Apparent Power:20000VA
Battery:
Battery type: Li-ion
Battery Input voltage range:600-980Vdc
Battery Max. Charge/Discharge current:26.25 /26.25Adc

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

Signed for and on behalf of TÜV Rheinland Australia Pty Ltd

John Wang

® TÜV, TUEV and TUV are registered trademarks . Utilisation and application requires prior approval.

TÜV Rheinland Australia Pty Ltd
182 Dougharty Road, Heidelberg West, VIC 3081
Phone: +61 (3) 9450 1400
Email: certification@au.tuv.com
Website: www.au.tuv.com
www.tuv.com

www.jas-anz.org/register

TÜVRheinland®
Precisely Right.

CERTIFICATE OF APPROVAL

Authorised marking: TUV-025885-EA

CONTINUATION SHEET 27

(Modification 10)

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: XBHP+3410/2, 4 layers
Installed within Solar Inverter
Ithe Solar at 40°C: 40A, Ithe Solar at 60°C: 40A
Brand: Entelar Energy
Model: EESOLAR-20KTL-MB0

Size: 546mm×460mm×228mm (W x H x D)
Enclosure material: Al 5052

Issue Date: 07/11/2024
Expiry Date: 23/03/2027

Signed for and on behalf of TÜV Rheinland Australia Pty Ltd

John Wang

www.jas-anz.org\register

TUV Rheinland Australia Pty Ltd
182 Dougharty Road, Heidelberg West VIC 3081
Phone: +61 (3) 9450 1400
Email: certification@au.tuv.com
Website: www.au.tuv.com

10/020 h 04.08 ® TÜV, TUEV and TUV are registered trademarks. Utilisation and application requires prior approval.

SUPPLIER DECLARATION OF CONFORMITY (SDoC)

In accordance with ISO/IEC 17050-1:2004

SDoC Identification Number[1]: EGPV-EESOLAR-20KTL-MB0

Issuer details

Name[2] (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[3] (Product name, type, rating, brand, model, batch numbers, and serial numbers, as applicable):

Product name: Solar Inverter Three phase 50Hz
Product series: EESOLAR-20KTL-MB0 (see attached list)

The Medium Risk Article listed above, fully complies:

With cited standard(s), as listed[4]:

Standard number and issue year: AS/NZS 3820:2020

Edition / Amendment status: N/A

Standard title: Essential Safety Requirements for Electrical Equipment

AS/NZS ZZ modified Yes ☐ No ☐ N/A ■

Standard number and issue year:

Edition / Amendment status:

Standard title:

AS/NZS ZZ modified Yes ☐ No ☐ N/A ■

OR Complies with the Conformity Cooperation Agreement (CCA)[5] Yes ☐ No ■

OR is registered on the EESS database & the declarer is registered as the responsible/affiliated supplier[6] Yes ☐ No ■ **EESS Equipment #** _____

Names and addresses of any Evaluating/Testing/Certification organisation or body used

Name(s):	Address(es):
TUV Rheinland Australia Pty Ltd.	182 Dougharty Road, Heidelberg West VIC 3081

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:	Report Certification or Document reference N°(s):	Issue dates(s):
Certificate: AS/NZS 4777.2:2020+A1, IEC 62109-2:2011, IEC 62109-1:2010	AZ 69028505	09/07/2025

Reference to any management quality system involved: -

Additional information[7]: -

Declaration (signed for and on behalf of):-

Name and position as authorised by the issuer[8]:

Laura Dewar, Entelar Energy Lead

Issuer Identification (as affixed to the article):

entelar ENERGY

Signature:

Date:

10 July 2025

Technical Specification	EESOLAR-20KTL-MB0
	Efficiency
Max. efficiency	98.4%
European weighted efficiency	98.1%
	DC Input
Recommended max. PV power	30,000 Wp
Max. input voltage [1]	1,100 V
Max. input current per MPPT	30 A (two strings) / 20 A (single string)
Max. short-circuit current	40 A
Start-up voltage	200 V
MPPT operating voltage range [2]	200 V ~ 1,000 V
Full-load MPPT voltage range	480 V ~ 800 V
Rated input voltage	600 V
Max. number of inputs	4
Number of MPP trackers	2
	Smart String Energy Storage System Terminal
Compatible Smart String ESS	EESTORE Battery System 5kWh – 15kWh
Number of terminals	2
Max. charging power	21 kW (Single string) / 25 kW (Two strings)
Max. discharge power	22.0 kW
Max. operating current	26.25 A (per string)
Operating voltage range	600 V ~ 980 V
	Output
Rated output power	20,000 W
Max. apparent power	22,000 VA
Max. active power (cosφ = 1)	22,000 W
Rated output voltage	220 Vac / 380 Vac, 230 Vac / 400 Vac, 240 Vac / 415 Vac; 3 W / N + PE
Rated output current	30.4 A / 380 Vac
	28.9 A / 400 Vac
	27.8 A / 415 Vac
Max. output current	33.6 A / 380 Vac
	31.9 A / 400 Vac
	30.8 A / 415 Vac
Rated AC grid frequency	50 Hz / 60 Hz
Adjustable power factor	0.8 leading - 0.8 lagging
Max. total harmonic distortion	≤ 3%
	Feature & Protection
Overvoltage category	PV II / AC III
Input-side disconnection device	Yes
Anti-islanding protection	Yes
AC over-current protection	Yes
DC reverse-polarity protection	Yes
DC surge protection	TYPE II
AC surge protection	Yes, compatible with TYPE II protection class according to EN/IEC 61643-11
DC insulation resistance detection	Yes
Residual current monitoring unit	Yes
Arc fault protection	Yes
	General Data
Operating temperature range	-25 °C ~ +60 °C (-13 °F ~ 140 °F)
Relative humidity	0 % RH ~ 100 % RH
Max. operating altitude	4,000 m (13,123 ft.) (Derating above 2,000 m)
Cooling	Smart air cooling
Display	LED indicators, Integrated WLAN + Univers APP
Communication	RS485; WLAN / Ethernet via EEDongleA-05
Weight	21 kg
Dimensions (W x H x D)	546 x 460 x 241.5 mm
Protection level	IP66
Max. number of paralleled unit (with Smart String ESS)	3
	Optimizer Compatibility
Compatible optimizer	SUN2000-450W-P2, SUN2000-600W-P, MERC-1100W-P, MERC-1300W-P
	Standards Compliance (More Available Upon Request)
Safety	RCM, IEC 62109-1&2, AS/NZS 60947.3:2025
Grid connection standards	AS/NZS 4777.2:2020, AS/NZS 4777.2:2015

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 Schedule 4 of the Electricity (Safety) Regulations 2010 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 - https://equipment.erac.gov.au/Registration/EquipmentSearch.aspx?atn=public . 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 listings of the current regulatory definitions for electrical equipment deemed to be medium risk articles, on the Energy Safety website www.energysafety.govt.nz.

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

MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT
HĪKINA WHAKATUTUKI

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"

1. Supplier details

Name (of manufacturer, importer or authorised agent): Entelar Group Ltd.	New Zealand physical address: 19 Gabador Place, Mount Wellington, Auckland 1060, New Zealand
New Zealand contact information: Telephone: +64 800 835 3447 Mobile: Fax: Email: support@entelargroup.co.nz	New Zealand postal address (if different):
(New Zealand) Company number or GST number: 9429050709007	ERAC Supplier Number: E10442

2. Product details

Brand name:	Entelar Energy	
Model, lot, batch or serial number:	EESOLAR-20KTL-MB0	
Description and function:	Solar Inverter	
If radio product:	Frequency or frequency range (MHz): 2400-2483.5MHZ	Radiated power e.i.r.p (dBW): 16.29dBm
Applicable standard title, number & edition:	CISPR 11:2015+A1:2016(Group 1), AS/NZS 4268:2017, AS/NZS 2772.2:2016	
Test report number or other identifier:	240223014SZN-001, 4791192519-1, 4791192519-2	

3. Declaration

I hereby declare that the product to which this declaration of conformity relates complies with the mentioned standard(s), and all products supplied under this Declaration will be identical to the sample identified in this Declaration.

Signature of supplier/agent:	Print name: Laura Dewar
Date: 28/02/2024	Position in organisation: Commercial & Logistics Lead