

# Mounting System Solutions

2025

# Tile Roof Mounting Solution

LE Tile Roof Mounting Solution has great flexibility and suitable for pitched rooftop. The innovative design made the installation easier. It's pre-assembly and customised solution has been time-saving and cost-efficient.

## Main Components



RAIL



END CLAMP



MID CLAMP



RAIL SPLICER



HOOK

## Technical Parameters:

|                       |  |
|-----------------------|--|
| Max Wind Capacity     | 45m/s  |
| Max Snow Capacity     | 0.8KN/m2   |
| Span Range            | 0.1 - 1.8m   |
| Design Standard       | A/SNZS1170, ASCE 7-05<br>DIN1044, BSEN1990:2002<br>BSEN1991-1-3:2002 |
| Installation Site     | Tile Roof  |
| Main Material         | AL6005-T5  |
| Fastener Material     | SUS304   |
| Applicable Modules    | Frame or Frameless   |
| Component Arrangement | Horizontal/Vertical  |
| Warranty Period       | 10 Years   |



# Tin Roof L Feet Mounting Solution

LE Tile Roof Mounting Solution has great flexibility and suitable for pitched rooftop. The innovative design made the installation easier. It's pre-assembly and customised solution has been time-saving and cost-efficient.

## Main Components



RAIL



END CLAMP



MID CLAMP



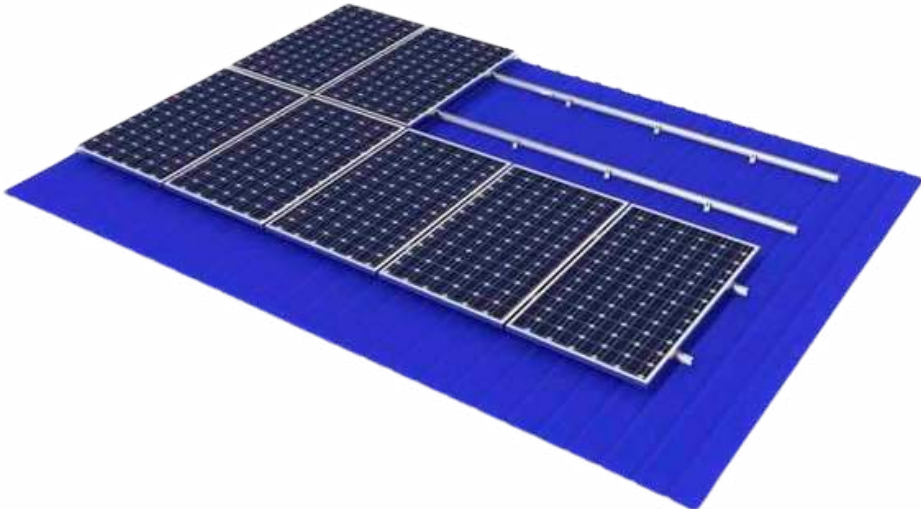
RAIL SPLICER



HOOK

## Technical Parameters:

|                              |   |
|------------------------------|---|
| <b>Max Wind Capacity</b>     | 45m/s   |
| <b>Max Snow Capacity</b>     | 0.8KN/m <sup>2</sup>  |
| <b>Span Range</b>            | 0.1 - 1.8m  |
| <b>Design Standard</b>       | A/SNZS1170, ASCE 7-05<br>DIN1044, BSEN1990:2002<br>BSEN1991-1-3:2002<br>BSEN1991-1-4:2005 |
| <b>Installation Site</b>     | Tile Roof   |
| <b>Main Material</b>         | AL6005-T5   |
| <b>Fastener Material</b>     | SUS304  |
| <b>Applicable Modules</b>    | Frame or Frameless  |
| <b>Component Arrangement</b> | Horizontal/Vertical   |
| <b>Warranty Period</b>       | 10 Years  |



# Tin Roof Mounting Solution

LE Trapezoidal Mounting Solution is widely used in large scale warehouse and workshop tin roofs. It 's structural efficient and easy installed which is time saving, cost-efficient and durable.

## Main Components



LIGHT RAIL



END CLAMP



MID CLAMP



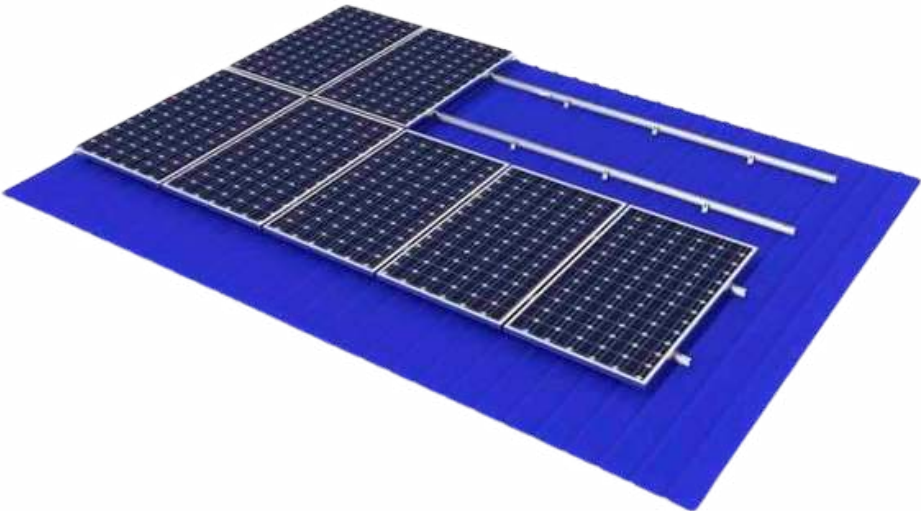
RAIL SPLICER



KLIPOK CLAMP

## Technical Parameters:

|                       |   |
|-----------------------|---|
| Max Wind Capacity     | 45m/s   |
| Max Snow Capacity     | 0.8KN/m2  |
| Span Range            | 0.1 - 1.8m  |
| Design Standard       | A/SNZS1170, ASCE 7-05<br>DIN1044, BSEN1990:2002<br>BSEN1991-1-3:2002<br>BSEN1991-1-4:2005 |
| Installation Site     | Tin Roof  |
| Main Material         | AL6005-T5   |
| Fastener Material     | SUS304  |
| Applicable Modules    | Frame or Frameless  |
| Component Arrangement | Horizontal/Vertical   |
| Warranty Period       | 10 Years  |



# Tin Roof Adjustable Mounting Solution



LE Adjustable Mounting Solution is lightweight with good strength and great corrosion stability. You can choose the best installation angle according to the longitude and latitude.

## Technical Parameters:

|                             |   |
|-----------------------------|---|
| Max Wind Capacity           | 42m/s   |
| Max Snow Capacity           | 1KN/m2  |
| Span Range                  | 0.6 - 2.5m  |
| Installation Angle Division | ±2°   |
| Adjustable Angle            | 10-15°, 15-30°, 30-60°  |
| Design Standard             | AS/NZS1170, ASCE 7-05,<br>DIN1044, BSEN1990: 2002,<br>BSEN1991-1-3: 2002,<br>BSEN199-1-4:2005 |
| Installation Site           | Tin Roof  |
| Main Material               | AL6005-T5   |
| Fastener Material           | SUS304  |
| Applicable Modules          | Frame   |
| Component Arrangement       | Vertical  |
| Warranty Period             | 10 Years  |

## Main Components



LIGHT RAIL



END CLAMP



MID CLAMP



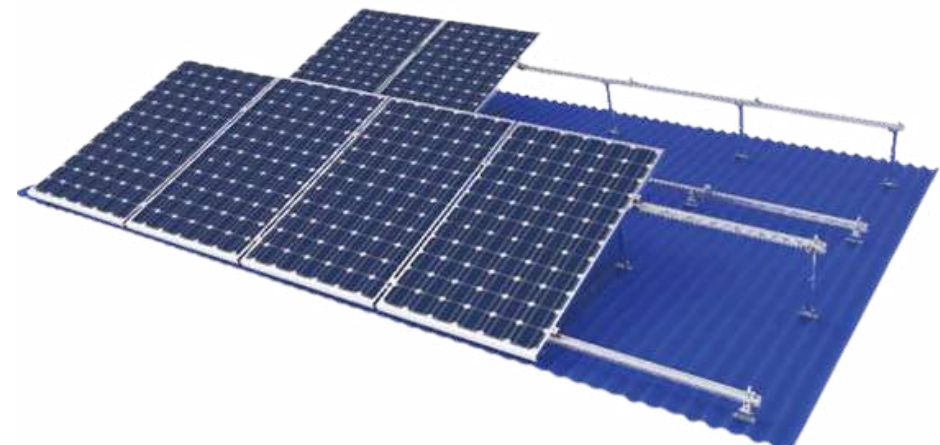
RAIL SPLICER



REAR COLUMN



FRONT COLUMN



# Flat Concrete Roof Triangle Mounting Solution



LE Triangle roof mounting system is suitable for concrete rooftop. It is lightweight, firm and material recyclable. It's also preassembly, less installation process on site

## Technical Parameters:

|                             |  |
|-----------------------------|--|
| Max Wind Capacity           | 42m/s  |
| Max Snow Capacity           | 1KN/m2   |
| Span Range                  | 0.6 - 2.5m   |
| Installation Angle Division | ±2°  |
| Adjustable Angle            | 10-15°, 15-30°, 30-60°   |
| Design Standard             | AS/NZS1170, ASCE 7-05,<br>DIN1044, GB50797-2012,<br>GB5009-2012,<br>BSEN1990: 2002,<br>BSEN1991-1-3: 2002,<br>BSEN199-1-4:2005 |
| Installation Site           | Concrete Roof  |
| Main Material               | AL6005-T5  |
| Fastener Material           | SUS304   |
| Applicable Modules          | Frame  |
| Component Arrangement       | Horizontal/Vertical  |
| Warranty Period             | 10 Years   |

## Main Components



LIGHT RAIL



END CLAMP



MID CLAMP



RAIL SPLICER



TRIANGLE RACK



RAIL CLAMP



# Light Ballast Mounting Solution

LE Light ballast mounting solution is specially designed for thenon-penetrating flat roof. The system is mainly used to fix the whole system by cement ballast to achieve strong wind resistance. The professional design makes the installation more convenient.

## Technical Parameters:

|                                    |  |
|------------------------------------|--|
| <b>Max Wind Capacity</b>           | 42m/s  |
| <b>Max Snow Capacity</b>           | 1KN/m2   |
| <b>Span Range</b>                  | 0.6 - 2.5m   |
| <b>Installation Angle Division</b> | ±2°  |
| <b>Tilt Angle</b>                  | 10-15°, 15-30°, 30-60°   |
| <b>Design Standard</b>             | AS/NZS1170, ASCE 7-05,<br>DIN1044, GB50797-2012,<br>GB5009-2012,<br>BSEN1990: 2002,<br>BSEN1991-1-3: 2002,<br>BSEN199-1-4:2005 |
| <b>Installation Site</b>           | Flat Concrete Roof   |
| <b>Main Material</b>               | AL6005-T5  |
| <b>Fastener Material</b>           | SUS304   |
| <b>Applicable Modules</b>          | Frame  |
| <b>Component Arrangement</b>       | Horizontal/Vertical  |
| <b>Warranty Period</b>             | 10 Years   |

## Main Components



END CLAMP



MID CLAMP



Z-ZHAPED RACK



# Adjustable Ballast Mounting Solution

LE Adjustable ballast mounting Solution is specially designed for the non-penetrating flat roof. The system is mainly used to fix the whole system by cement ballast to achieve strong wind resistance. The professional design makes the installation more convenient.

## Technical Parameters:

|                       |   |
|-----------------------|---|
| Max Wind Capacity     | 42m/s   |
| Max Snow Capacity     | 1KN/m2  |
| Installation Angle    | 5°, 10°, 15°, 20°   |
| Design Standard       | AS/NZS1170 ASCE 7-05,<br>DIN1044 GB50797-2012,<br>GB 50017-2003 |
| Installation Site     | Flat Concrete Roof  |
| Main Material         | Q235B   |
| Fastener Material     | SUS304  |
| Applicable Modules    | Frame   |
| Component Arrangement | Horizontal/Vertical   |
| Warranty Period       | 10 Years  |

## Main Components



END CLAMP



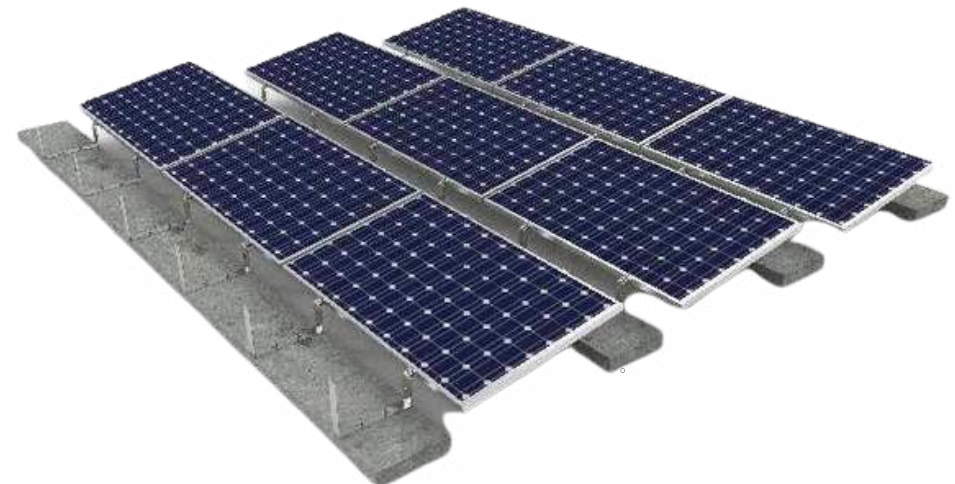
CONNECTOR  
FRONT LEG



CONNECTOR  
REAR LEG



U-SHAPED  
SUPPORTING LEG





# All Aluminium Ground Mounting Solution



LE All Aluminum Ground Mounting Solution can be installed with concrete foundations or ground screws. It is lightweight, firm and material recyclable. It is also preassembled, so the installation process onsite is minimal.

## Technical Parameters:

|                             |   |
|-----------------------------|---|
| Max Wind Capacity           | 52m/s   |
| Max Snow Capacity           | 1.5KN/m2  |
| Span Range                  | 2.5-3.8M  |
| Installation Angle Division | ±2°   |
| Design Standard             | AS/NZS1170, ASCE 7-05,<br>DIN1044, BSEN1990: 2002,<br>BSEN1991-1-3: 2002,<br>BSEN199-1-4:2005 |
| Installation Site           | Flat Concrete Roof or Ground  |
| Main Material               | AL6005-T5   |
| Fastener Material           | SUS304  |
| Applicable Modules          | Frame   |
| Component Arrangement       | Horizontal/Vertical   |
| Warranty Period             | 10 Years  |

## Main Components



END CLAMP



MID CLAMP



RAIL



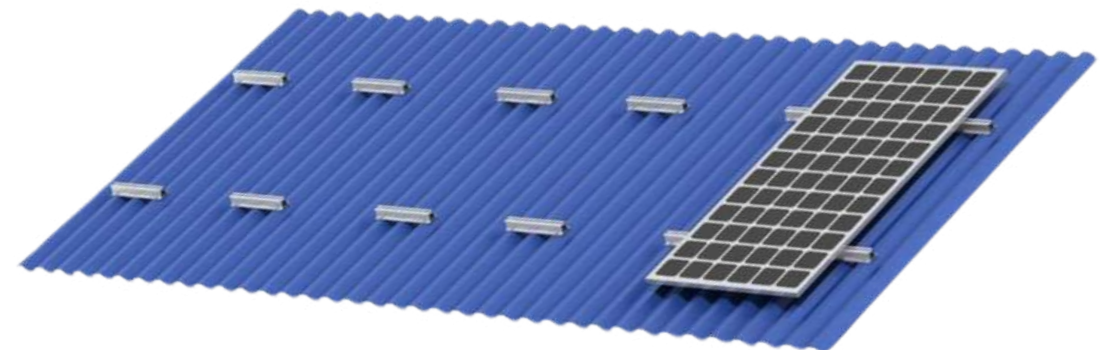
RAIL SPLICER



RAIL CLAMP



PREASSEMBLY  
RACK



# Concrete Foundation Mounting Solution



LE Steel Concrete Foundation Mounting Solution is strong overall stability, wind and snow resistance. For different foundations, the system can be fixed on concrete base with embedded anchor bolt, or fixed with ground screw. It is flexible in design, diversified in Solution and wide in application.

## Technical Parameters:

|                             |   |
|-----------------------------|---|
| Max Wind Capacity           | 52m/s   |
| Max Snow Capacity           | 1.5KN/m <sup>2</sup>  |
| Span Range                  | 0.6-3.2M  |
| Installation Angle Division | ±2°   |
| Design Standard             | AS/NZS1170, ASCE 7-05,<br>DIN1044, BSEN1990: 2002,<br>BSEN1991-1-3: 2002,<br>BSEN199-1-4:2005 |
| Installation Site           | Flat Concrete Roof or Ground  |
| Main Material               | Zinc Aluminum Magnesium(ZAM) coating steel  |
| Fastener Material           | SUS304  |
| Applicable Modules          | Frame or Frameless  |
| Component Arrangement       | Horizontal/Vertical   |
| Warranty Period             | 10 Years  |

## Main Components



END CLAMP



MID CLAMP



RAIL



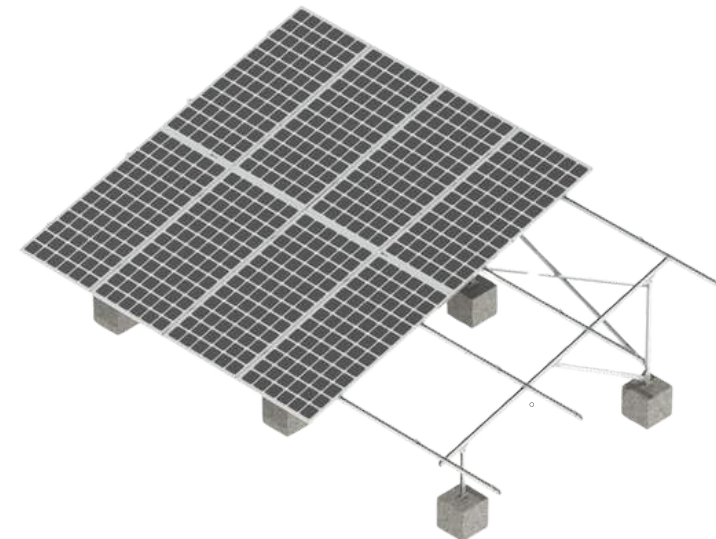
RAIL JOINER



SUPPORT RACK



RAIL CLAMP



# Single pole Steel Pile Mounting Solution

Steel Pile Mounting System is designed to provide an economical and practical mounting solution for large-scale open areas. Suitable for both framed and frameless modules. Compatible with pile driving ram making installations on the open area easy. Long service life of minimum 25 years enabled due to the high-quality materials.

## Technical Parameters:

|                                    |  |
|------------------------------------|--|
| <b>Max Wind Capacity</b>           | 60m/s  |
| <b>Max Snow Capacity</b>           | 3KN/m <sup>2</sup>                                 |
| <b>Installation Angle Division</b> | ±2°  |
| <b>Design Standard</b>             | JIS C8955:2017                                     |
| <b>Installation Site</b>           | Ground   |
| <b>Main Material</b>               | Q235B & Zinc Aluminum Magnesium(ZAM) coating steel |
| <b>Fastener Material</b>           | SUS304   |
| <b>Applicable Modules</b>          | Frame or Frameless                                 |
| <b>Component Arrangement</b>       | Horizontal/Vertical                                |
| <b>Warranty Period</b>             | 10 Years   |

## Main Components



RAIL



DIAGONAL BRACING



SHAPED STEEL



GRIDER



RAIL JOINER



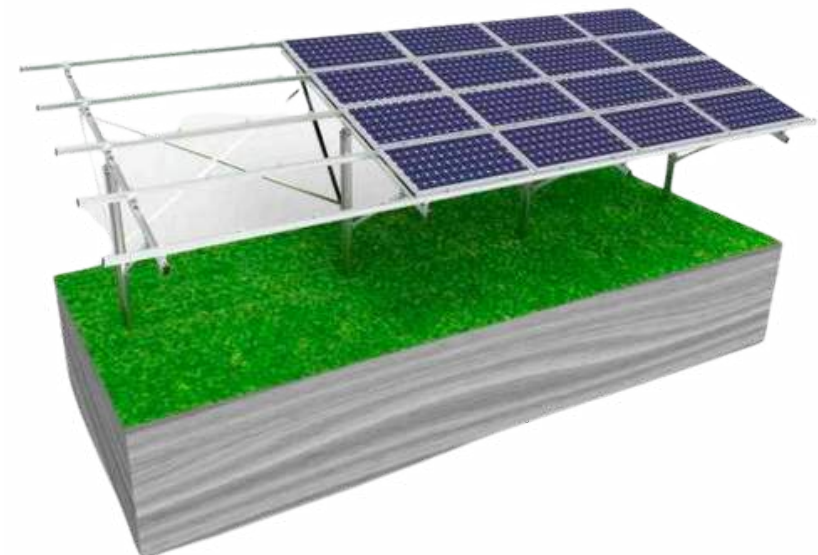
END CLAMP



MID CLAMP



RAIL CLAMP



# Carport Aluminum Mounting Solution



The Aluminum carport structure with W type is suitable for installation conditions with medium load, larger installation angle of the carport, and the layout with more rows. Both waterproof and non-waterproof types can be designed according to requirements. Its special structural design allows two or four cars to be freely combined as a unit to maximize the use of space.

## Technical Parameters:

|                             |                     |
|-----------------------------|---------------------|
| Max Wind Capacity           | 60m/s               |
| Max Snow Capacity           | 3KN/m2              |
| Installation Angle Division | ±2°                 |
| Design Standard             | JIS C8955:2017      |
| Installation Site           | Ground              |
| Main Material               | AL6005-T5           |
| Fastener Material           | SUS304              |
| Applicable Modules          | Frame or Frameless  |
| Component Arrangement       | Horizontal/Vertical |
| Warranty Period             | 10 Years            |

## Main Components



END CLAMP



MID CLAMP



BASE



GIRDER



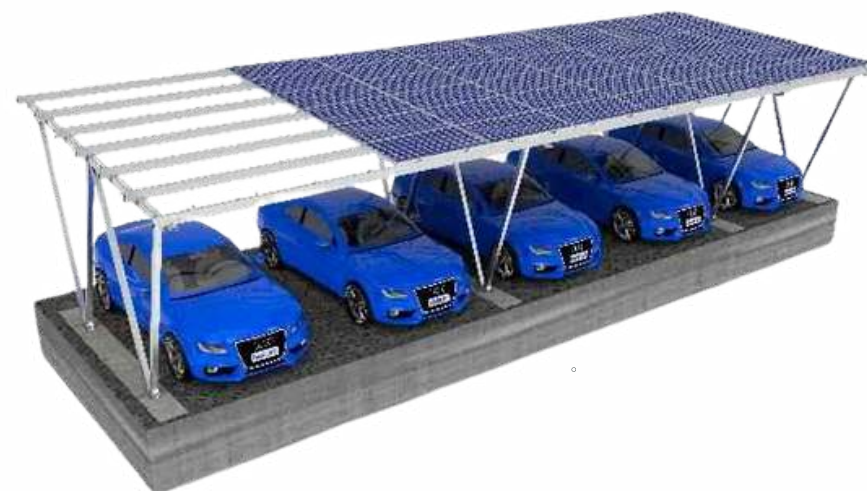
STAND COLUMN



RAIL CLAMP



RAIL



# Solar Canopies

Car Park Utilisation



## Key Features



Efficient Use of Space



Integration with EV Charging Stations & BESS



Scalable Solution & Vehicle Protection



Energy Cost Reduction & Revenue Generation




Customisable Framework


## BESPOKE SYSTEM

Maximise unutilised space by transforming parking locations into revenue generating assets

Models are customisable and manufactured to your infrastructure requirements.

When combined with BESS Solar canopies and EV become a consistent cost-effective revenue asset, serving both your employees, customers and the general public.

 01453 545222

 [Info@immersa.co.uk](mailto:Info@immersa.co.uk)



# Operation and Maintenance

Immersa's service package is designed to optimise the performance, reliability, and lifespan of your Battery Energy Storage System (BESS). With proactive maintenance, potential issues are identified and resolved early, minimizing downtime and preventing unexpected problems.

Regular system checks extend your BESS's lifespan, protecting your investment and providing long-term value. The package includes priority support for quick issue resolution, helping avoid costly emergency repairs and manage budgets more effectively.

You'll also gain access to Alpha Cloud, a digital monitoring tool offering real-time data and smart management for maximum efficiency and cost savings. Immersa ensures your BESS operates at peak performance, supporting your energy goals.

## Benefits of O&M

- **Ongoing System Reliability:** You'll receive proactive maintenance schedules, assessing and improving the system's mechanical and electrical configuration regularly. This will ensure any system issues are identified and prevented from escalating, ensuring the system does not experience any unexpected downtime and consequential energy management problems.
- **Extended System Lifetime:** Quarterly Regular maintenance, prompt issue identification, and reporting to assess the BESS current operating condition. This aims to extend the lifespan of your BESS, protecting your return on investment and long-term system value.
- **Priority Support:** As part of this exclusive offering, you'll receive priority access to our technical support team, ensuring any issues are addressed quickly and effectively.
- **Cost Savings:** Identification and prevention of issues through proactive maintenance guarantees that you will avoid any unforeseen high-expenditure and cash management issues associated with emergency fixes or component replacements. Immersa's service will instead allow you to budget more predictably and affordably to ensure your system's performance is optimised throughout your lifetime.

# Operation and Maintenance

As part of Immersa's installation and LTSA package, every system includes a free digital system monitoring platform, the Alpha Cloud.

This package allows you and Immersa to monitor your system, providing real-time data into the battery's current capacity, state of charge, and performance. It will provide both parties with the option to update any configuration preferences to optimise your energy requirements, tailoring it towards your objectives no matter the context.


The software is further capable of monitoring and using the data to create accurate forecasts for supply and demand, enabling its smart management system to charge and discharge accordingly to maximise self-consumption, revenues and cost savings.


Immersa & Alpha's dedicated technical team and engineers will be able to use this platform to locate system faults, troubleshoot issues, and update its configuration to guarantee safe operations and performance optimisation throughout its lifetime.




ALL O&M contracts are bespoke based on the solutions we have provided and the customer's needs. To find out more about how we can help you get the best contract for you system get in touch today and speak to one of our experts.


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