



PRODUCT DATASHEET

Water Ballast Solar Mounting System

A practical, non-penetrating mounting solution for landscape solar modules on suitable flat roofs and prepared ground-level surfaces.

FIXED TILT

15°

EMPTY MASS

5 kg

FILLED MASS

70 kg

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WATER BALLAST MOUNT

Product overview

Designed to support framed solar modules in landscape orientation without routine roof penetrations, subject to site-specific structural and wind-load verification.

WHY USE A WATER BALLAST SYSTEM?

The ballast is positioned on a suitable flat surface and filled with water after the array has been aligned. The resulting mass helps stabilise the mounting structure while reducing the need to penetrate the roof membrane.

Its fixed 15° angle promotes drainage and solar exposure. The final layout, ballast quantity and rail arrangement must be confirmed for the actual module dimensions, roof loading and environmental conditions.

TYPICAL APPLICATIONS

● Flat concrete roofs

For suitable structures with verified load capacity and protected waterproofing.

● Prepared ground surfaces

For level, stable areas where a low-profile solar array is required.

● Non-penetrating layouts

Helps minimise routine roof penetrations when the engineered design permits.

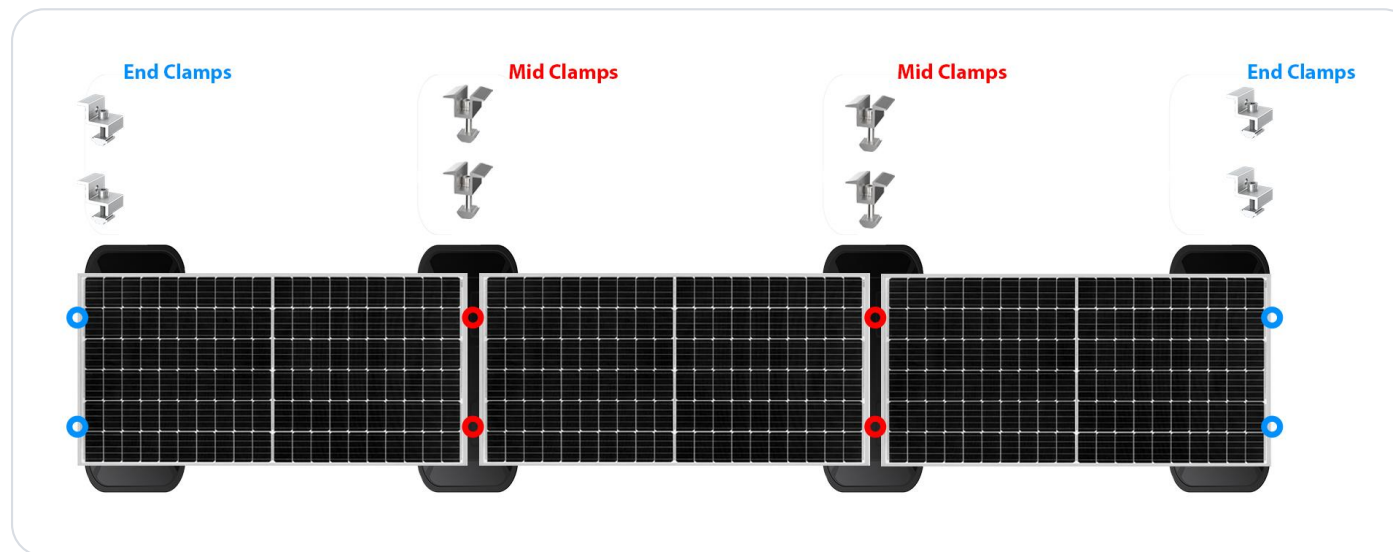
TECHNICAL SPECIFICATIONS

Overall length	1 116 mm
Overall width	378 mm
Overall height	280 mm
Fixed module tilt	15°
Mass - empty	5 kg
Mass - water-filled	70 kg
Module orientation	Landscape

LANDSCAPE MODULE ARRANGEMENT

Rail and clamp layout

The illustration below shows a typical continuous row. End clamps secure the outer module edges, while mid clamps secure adjacent modules along the row.



COMPONENT GUIDE

Included with ballast

Water ballast body with its mounting brackets.

Typically required separately

- 4.8 m LDIP aluminium rails
- Mid and end clamps
- Compatible fasteners

Select clamps to match the solar module frame thickness.

RAIL CONFIGURATION OPTIONS

OPTION 1 | FULL-LENGTH RAILS

Use 4.8 m LDIP rails as continuous members across multiple ballasts. This provides greater continuity and is generally preferred where additional rigidity is required, subject to the approved design.

OPTION 2 | SEGMENTED RAILS

The 4.8 m rails may be cut into approximately 400 mm sections, typically using two sections per ballast. Confirm all cut lengths and fixing positions against the selected module before cutting.

INSTALLATION GUIDANCE

Plan the complete array before filling

Positioning, alignment and verification should be completed while the ballast units are empty. Fill the units only after the complete mounting structure has been checked.

1

Survey the site

Confirm usable area, drainage routes, shading and safe service access.

2

Verify design loads

Confirm roof capacity, wind actions and the required ballast arrangement.

3

Set out the array

Mark module rows, ballast positions, spacing and cable routes.

4

Install rails and clamps

Align the structure and use compatible clamps and fasteners.

5

Mount and inspect

Check module alignment, clearances and fastener torque.

6

Fill and commission

Fill the ballasts, secure caps and complete the final inspection.

**IMPORTANT DESIGN AND SAFETY NOTE**

A 70 kg filled mass is a product specification - it is not a universal wind-load rating. Final ballast quantity and array design must be determined for the roof height, edge zones, local wind conditions, module size, support surface and structural capacity. Protect roof membranes, maintain drainage and use a competent installer or engineer where required.