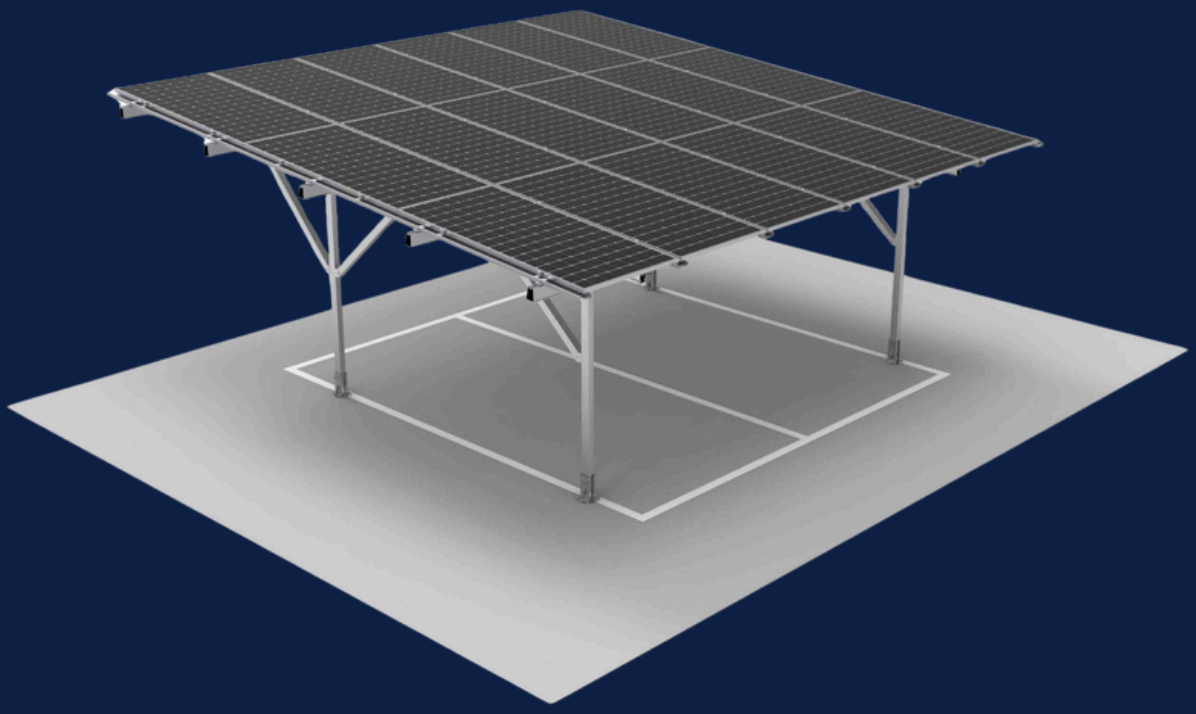
LUMASOL

# LUMASOL ALUMINIUM ECONO CARPORT SYSTEM



## ABOUT THE SYSTEM:

The Lumasol Aluminium Econo Carport System is a lightweight, cost-effective solar parking solution designed to unlock the solar potential of underutilized parking areas.

Manufactured primarily from high-grade aluminium structural components, the system offers excellent corrosion resistance, simplified installation, and reduced structural weight - making it ideal for sites where budget efficiency and installation speed are key considerations.

The Lumasol Econo Carport is particularly suited for lower traffic parking environments where unused parking areas can be converted into clean energy generation assets.

## SYSTEM CONFIGURATIONS:

The Lumasol Aluminium Econo Carport is fully configurable to suit different site layouts and solar generation requirements.

### North Facing Configuration

Designed to maximize solar yield in the Southern Hemisphere
Panels can be installed in portrait or landscape orientation
Ideal for perimeter parking rows

### East / West Configuration

Dual-direction layout maximizes energy production throughout the day
Allows efficient utilization of central parking aisles

### Adjustable Tilt Options

The system allows flexible tilt configurations depending on site requirements.

- Tilt Angle Range: 5° – 10°

## KEY SYSTEM FEATURES:

- Lightweight Aluminium Structure
- Cost-Effective Solar Parking Solution
- Corrosion Resistant Materials
- Flexible Layout Design
- Efficient Use of Unused Parking Areas

## MATERIAL + SURFACE TREATMENT:

| COMPONENT | MATERIAL | SURFACE TREATMENT |
|---|---|---|
| Structures | AL6005-T5 Aluminium | Anodised (10 µm) |
| Fasteners | SUS304 | Stainless Steel |
| Base Plate | Q235 Carbon Steel | Hot Dip Galvanised (65 µm) |

**STRUCTURAL DESIGN STANDARDS:**

All Lumasol carport structures are designed in accordance with the following South African National Standards (SANS):

**SANS 10160** – Basis of structural design and actions for buildings and industrial structures (including wind loading)
**SANS 10162** – Structural use of steel. (where applicable)





