

# OMNI DIRECTIONAL SORTATION



**OMNIA WHEEL**

MAKING MOBILITY INTUITIVE

**SIMPLE  
FLEXIBLE  
SCALABLE  
RELIABLE**

# A REVOLUTION IN SORTATION



## 360° FLEXIBILITY

**NO POP UPS  
NO SWIVELS  
NO PUSHERS  
NO PNEUMATICS**

OMNIA™ multi directional tables harness the unique capabilities of omni wheels to deliver 360° solutions for logistics and manufacturing.

Tables are programmable to send items in any direction and can be combined to achieve a range of complex manipulations.



# SIMPLICITY BY DESIGN



## SIMPLE WHEEL-ON-SHAFT CONSTRUCTION

### **SIMPLE INSTALLATION**

The light, compact design enables hassle free installation into existing conveyor rail systems or as an independent unit.

### **PLUG + PLAY**

Compatible with 24V systems with no pneumatics or hydraulics.

Can be supplied preprogrammed or as a programmable ready module.

You'll be up and running in no time.

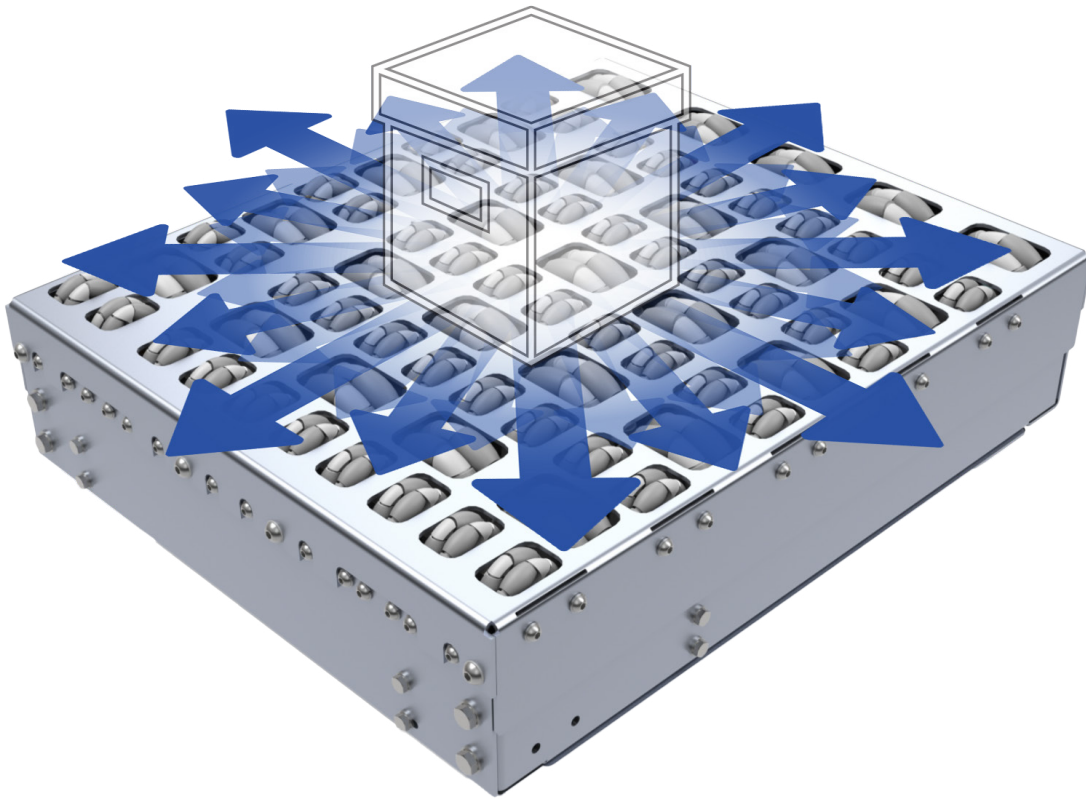
### **LOW MAINTENANCE**

Simple mechanics utilizing continuous transposed shafts and omni wheels isolates the predominant wear to the loaded contact points only.

Mean time to failure is extended and preventative maintenance reduced.

# 360° FLEXIBILITY

## UNLIMITED DIRECTIONALITY



Plug and play modules divert, sort, merge, align, rotate and singulate with precision, at any angle.

### MULTIFUNCTIONAL

Modules can be programmed to divert packages at any angle, intermittently.

Multiple units can be combined to perform more complex manipulations.

Ideal for labeling, printing, scanning, sampling, quality inspection etc.

### SPACE SAVER

Trouble free compact 180° returns saves valuable floorspace.

Complex manipulations can be performed on a minimal footprint.

Low profile design enables compact multi-level layouts.

### ASSET UTILIZATION

In a world of constant change, de-risk your investment and reduce cost of ownership.

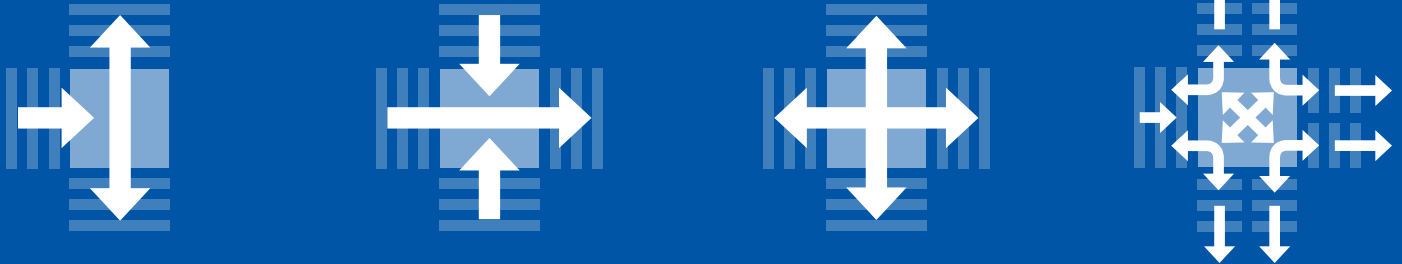
Modules can be reprogrammed and re-purposed to meet future needs, reducing asset redundancy.

# DO MORE WITH LESS

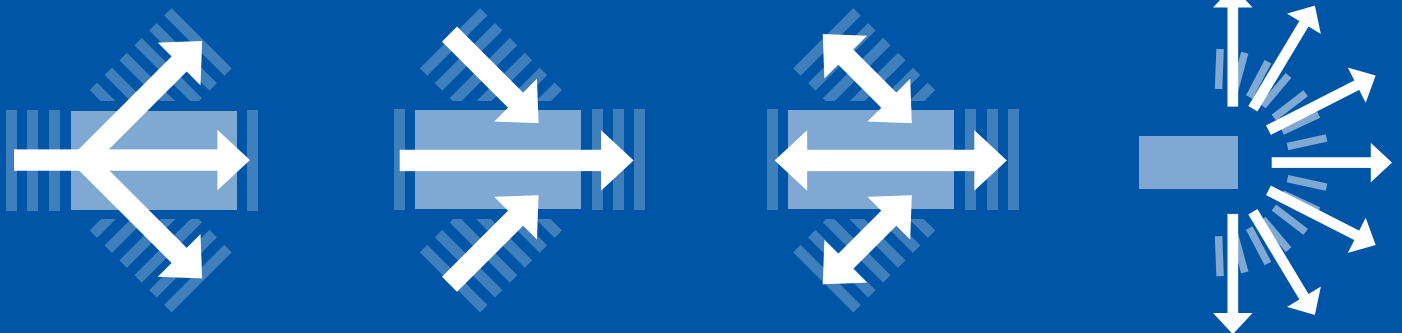
# PROGRAMMABLE FUNCTIONALITY

As long as it's within the laws of physics, an OMNIA sortation solution can achieve your sortation objectives for a wide range of packages.

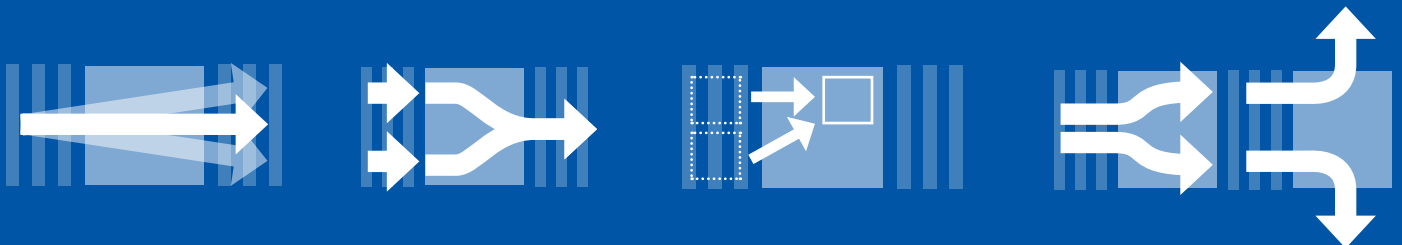
## 90° Divert/Merge



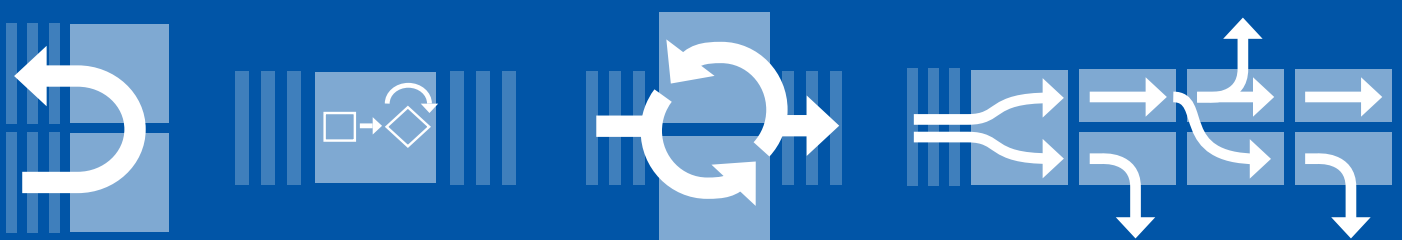
## Spur (90°-180°) Divert/Merge



## Alignment, Centering & Positioning

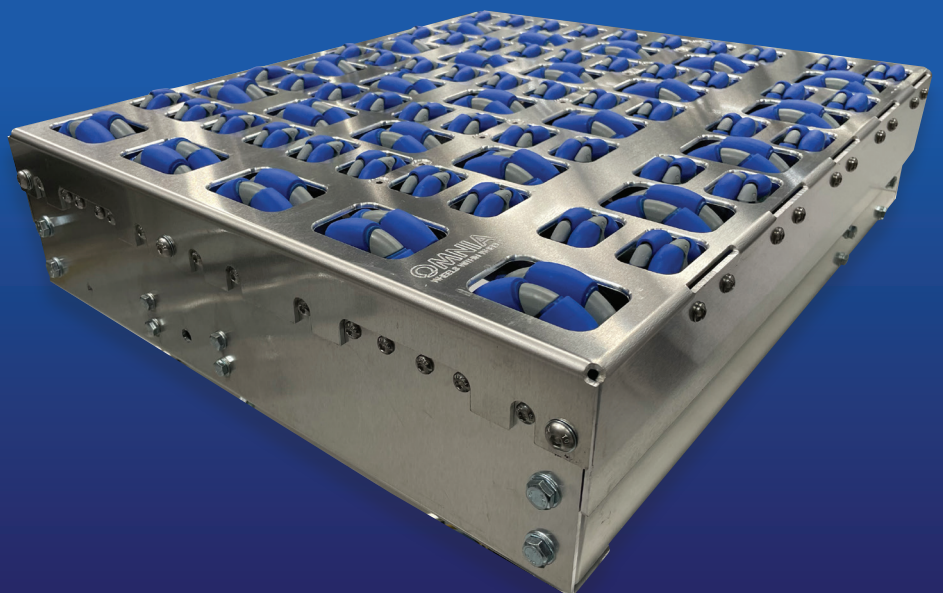
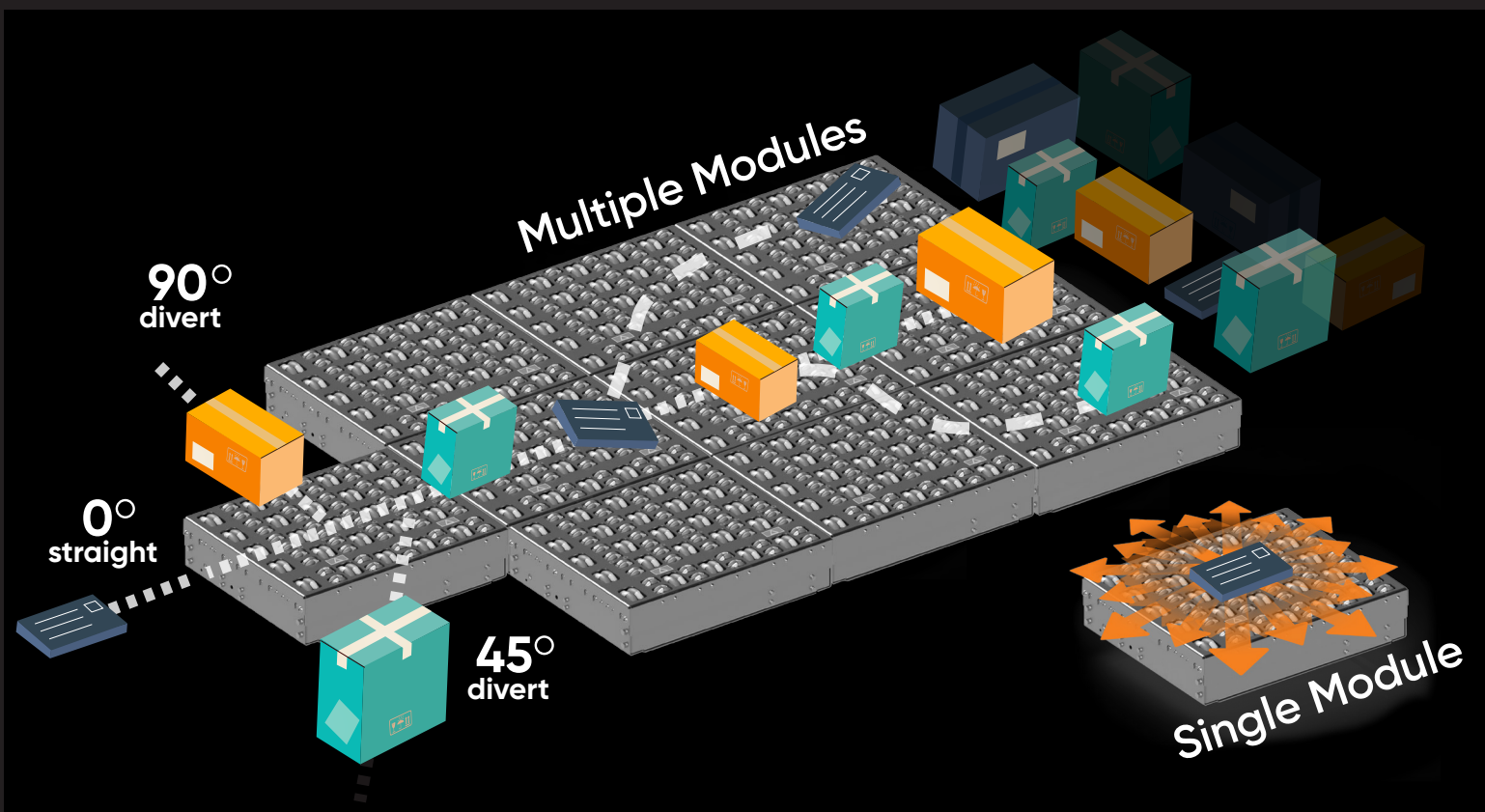


## U-turn, Rotation & Orientation, Bypass Diversion



# SPACE SAVING SINGULATION

Learn more at [omniawheel.com](http://omniawheel.com)



# SCALABILITY

## LOAD | SIZE | FUNCTION

### LOADS

From envelopes to pallets, OMNIA's proprietary omni wheels can handle a wide range of loads and the toughest of sortation challenges.

Designed for impact resistance and low wear they deliver mission critical reliability.

### SIZING

Using a single unit or multiple modules, systems can be sized to sort small packages to large flat panel products, or combined to meet the challenge.

### FUNCTIONALITY

While a number of manipulations can be achieved by an individual unit, complex or combinations of movements can be realized by combining multiple modules.

HIGHLY ADAPTABLE  
SOLUTION THAT SCALES  
WITH CHANGING NEEDS



# RELIABILITY THROUGH SIMPLICITY



The simple, light, compact design uses fewer parts and generates less wear, reducing unplanned downtime.

## FEWER PARTS

Complex actuation associated with pop ups, swivels and pneumatics are eliminated.

The simple driven omni wheel-on-shaft design requires fewer parts, making it more reliable.

## LESS WEAR

With friction being primarily limited to the contact surface of the payload/package, overall wear is minimized, increasing mean time to failure.

## LESS DOWNTIME

In addition to the benefits of fewer parts and less wear, modules can be readily swapped out in minutes for preventative maintenance or part replacement.

Costly downtime is minimized.



# CHANGING THE WAY THE WORLD MOVES



## OUR STORY

OMNIA is leading the world in the production of high performance omni wheels and their applications. The patented omni wheel manufacturing methods deliver the most robust, impact and wear resistant wheels of their type making them ideal for mission critical applications.

The use of omni wheels to sortation challenges is revolutionising the sector with 360° diversion capability that can be programmed to achieve a range of highly complex manipulations for large and small payloads.

Manufactured in Australia, OMNIA sortation modules are highly adaptable, and reprogrammable to meet changing business needs.

## OMNI WHEELS

Omni wheels truly are a revolution in motion. Unlike others, the monocoque polymer construction removes the need for pins, bolts or inserts, creating, pound for pound, the most impact resistant omni wheel in the market.

OMNIA's wheels have been proven in demanding materials handling applications over the past 15 years and are the ideal choice for industrial applications in the most challenging and corrosive environments.



**MHI** Member Since 2006



# SUSTAINABILITY NOW

## ENERGY EFFICIENCY

Energy is predominantly consumed driving the payload, not the components of the system.

The low friction, light weight design generates less heat and uses less power.

## NOISE REDUCTION

A low noise rating, averaging 64 dB, (equivalent to a standard office environment), reduces the need for hearing protection and noise pollution compared to typical industrial environments.

## ASSET LIFE CYCLE

The highly adaptable, modular design and programmable functionality ensures product lifespan is maximized, delaying the need for asset replacement.

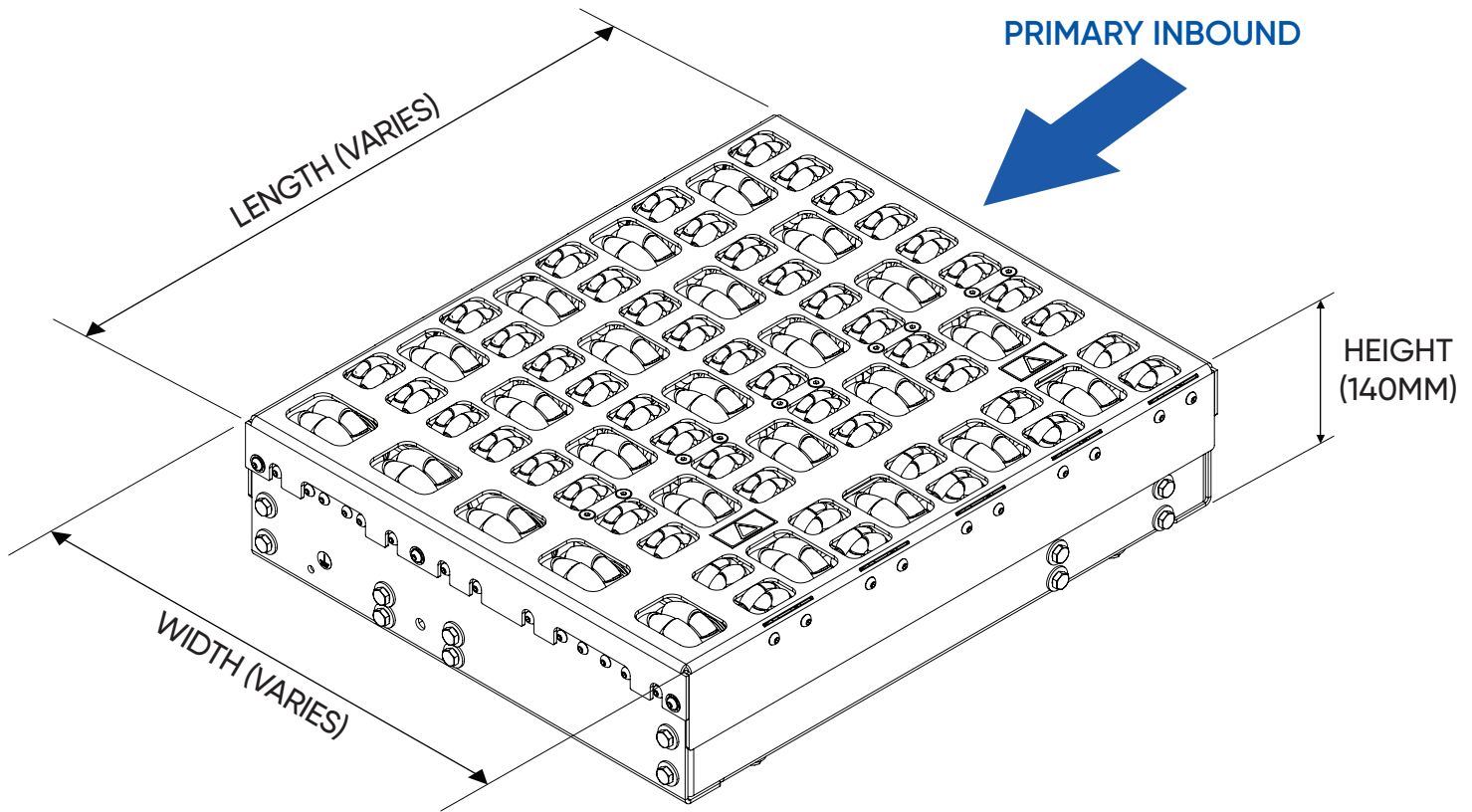
Made predominantly from recyclable materials and components.



OMNIA  
POWERED BY  
SOLAR

OMNIA WHEEL Factory | Enterprise Drive Beresfield NSW Australia 2322

# OMNIA SORTATION SPECIFICATIONS



## Product Range

Model No.	11-5565-01*	11-5566-01*	11-5567-01*	11-5595-01*
Length* (mm)	595			910
Width* (mm)	495	595	695	495
Height* (mm)	140			
Weight* (kg)	23	28	30	32

\*Dimensions are specific to standard modules. Custom dimensional requirements can be accommodated.

\*Change -01 to -02 in part number for ERSC module.

## Specifications

Load Capacity**	250g - 30kg (9oz - 66lbs)	
Max Line Speed	< 1.5m/s (295ft/min)	
Divert Rate***	100% Hourly	2880 packages
	50% Hourly	4800 packages
Divert Angle	Variable through 360° (programmable)	
Power Supply	Requires 24V DC, max draw 2A, 8A breaker	
Package Sizing	> 150x150mm (6"x6")	

Automation	2x Pulse Roller MDRs, 1x ConveyLinX AI2	
Sound Level	64 dBA	
Operating Environment	Temp	5°C - 40°C (41°F - 104°F)
	Ambient Temp Humidity	up to 95%

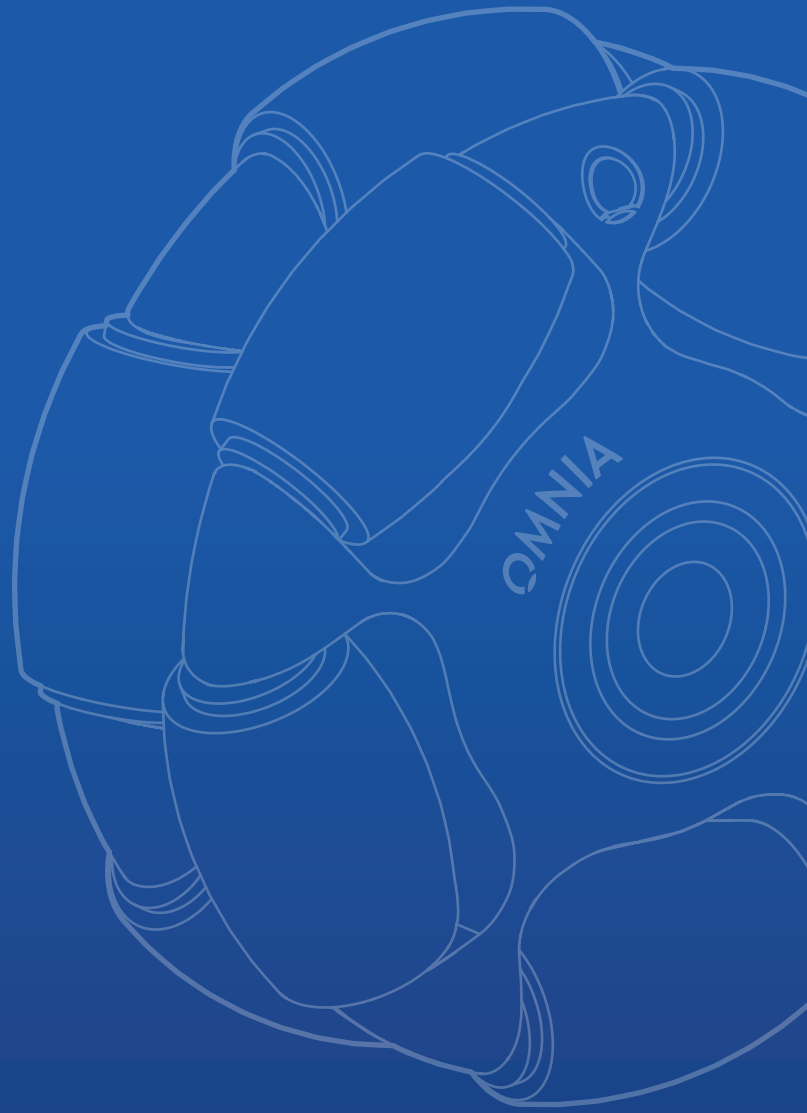
\*\* Systems can be scaled for loads.

\*\*\* Assuming 90° divert, 30kg (66lbs) payload, 300x300mm package, 1.5m/s line speed, (295ft/min) 25°C (77°F)



# OMNIA WHEEL

MAKING MOBILITY INTUITIVE



**OMNIA Wheel Ltd**

7 Enterprise Drive  
Beresfield NSW 2322  
Australia

omniawheel.com  
sales@omniawheel.com  
AU +61 2 4907 8100