

# 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

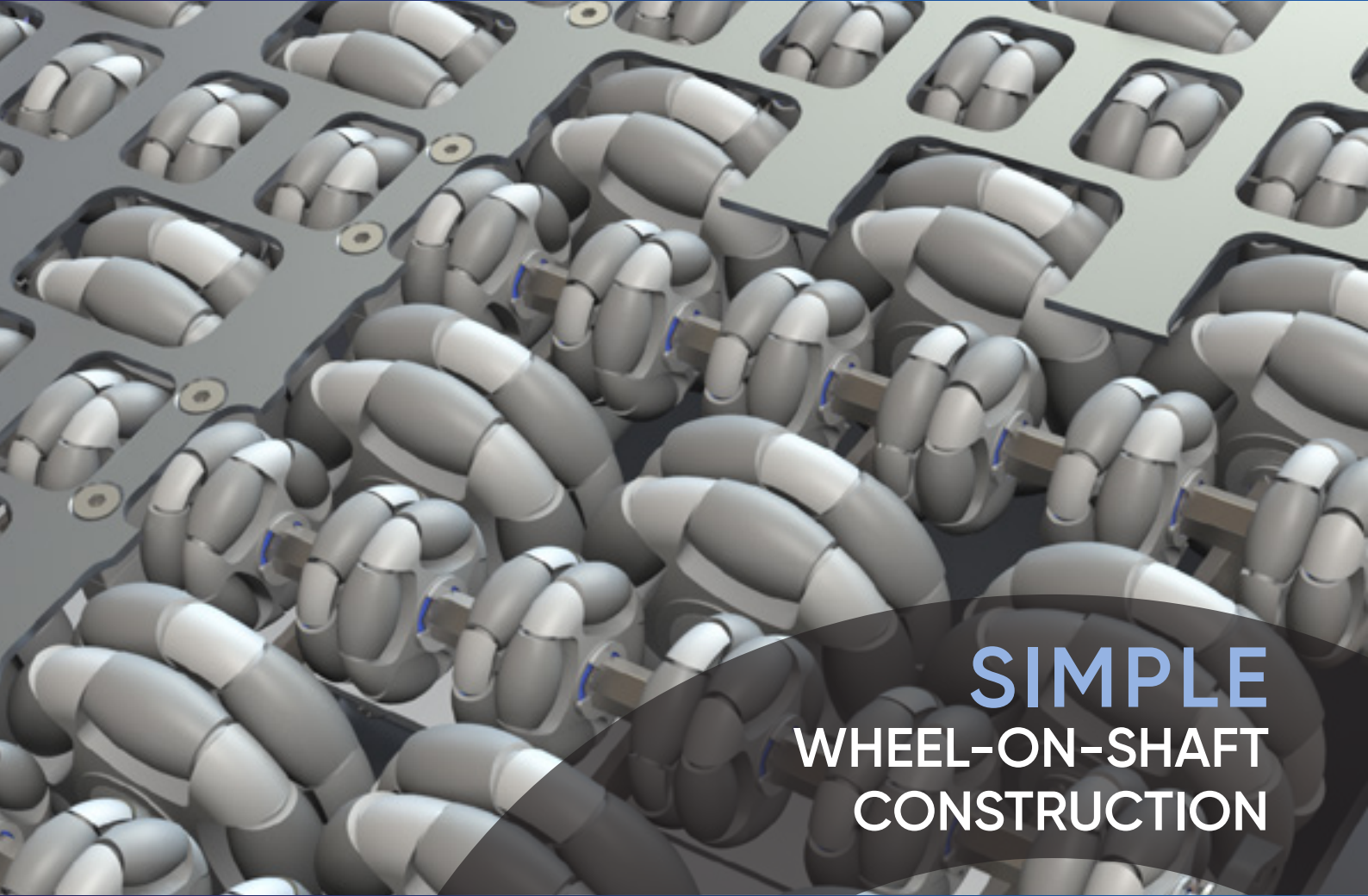
NO PNEUMATICS

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.

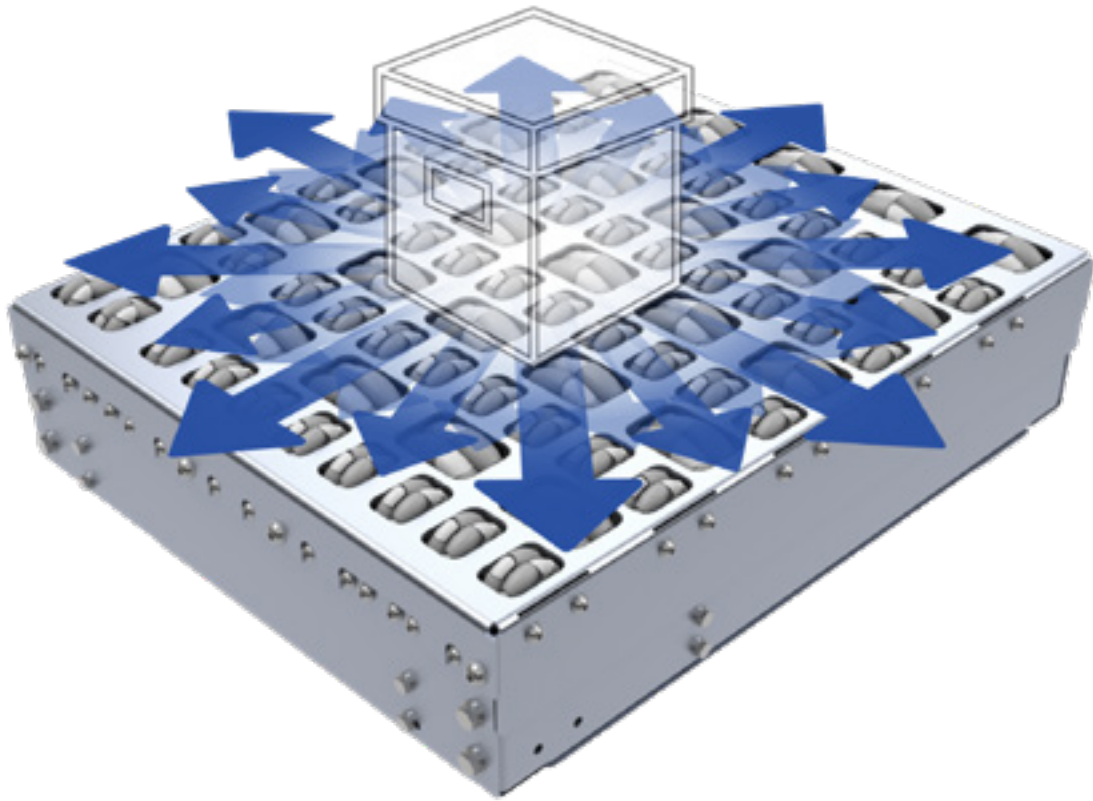
### LOW MAINTENANCE

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.

# DO MORE WITH LESS

### 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

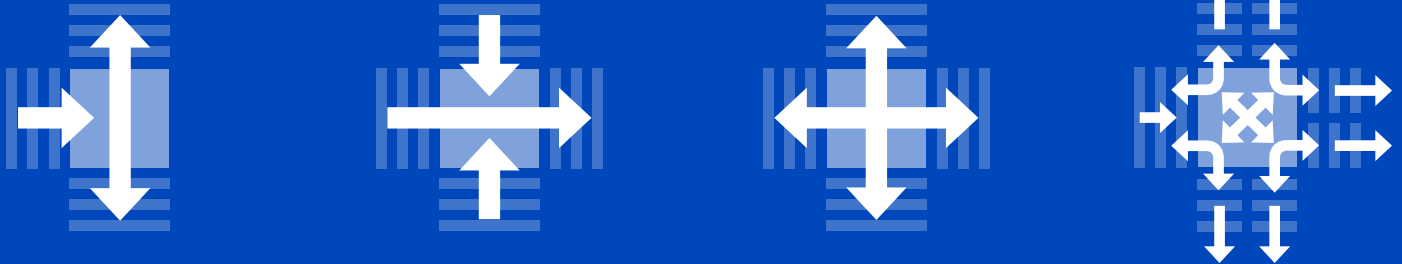
In a world of constant change, de-risk your investment and reduce cost of ownership.

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

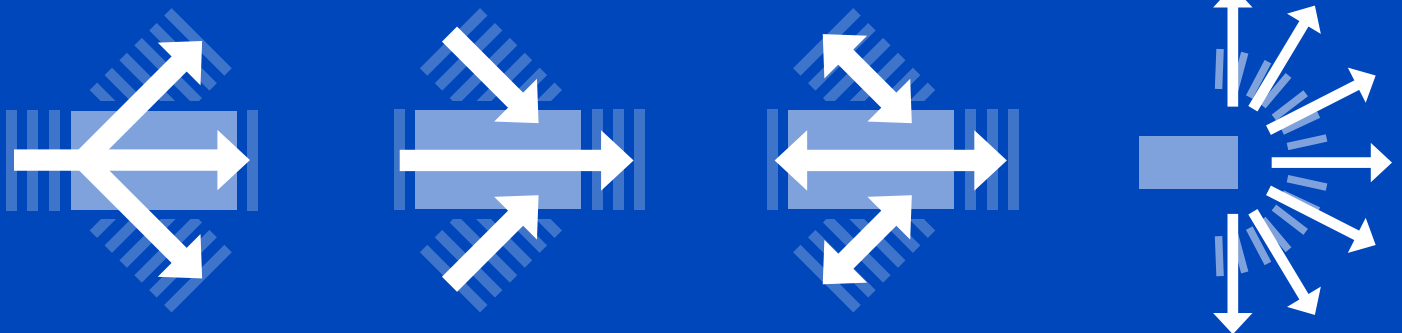
# PROGRAMMABLE FUNCTIONALITY

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.

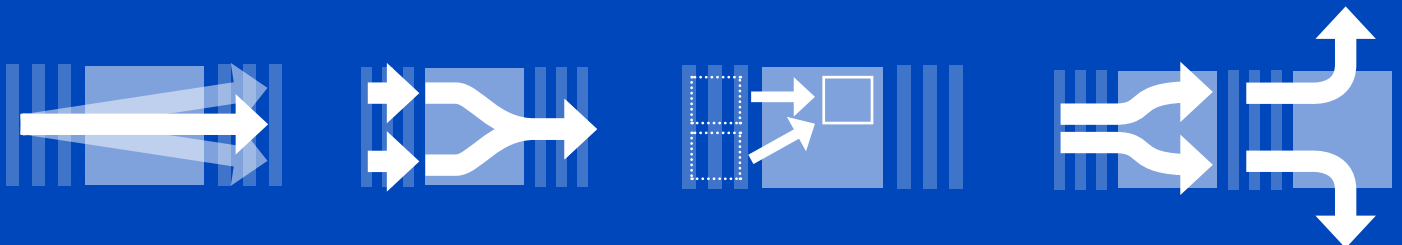
## 90° Divert/Merge



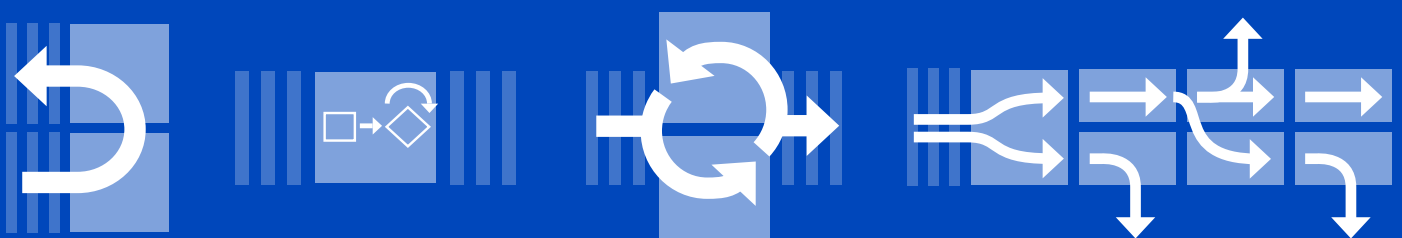
## Spur (90°-180°) Divert/Merge



## Alignment/Centering & Precision Positioning



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



# 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.

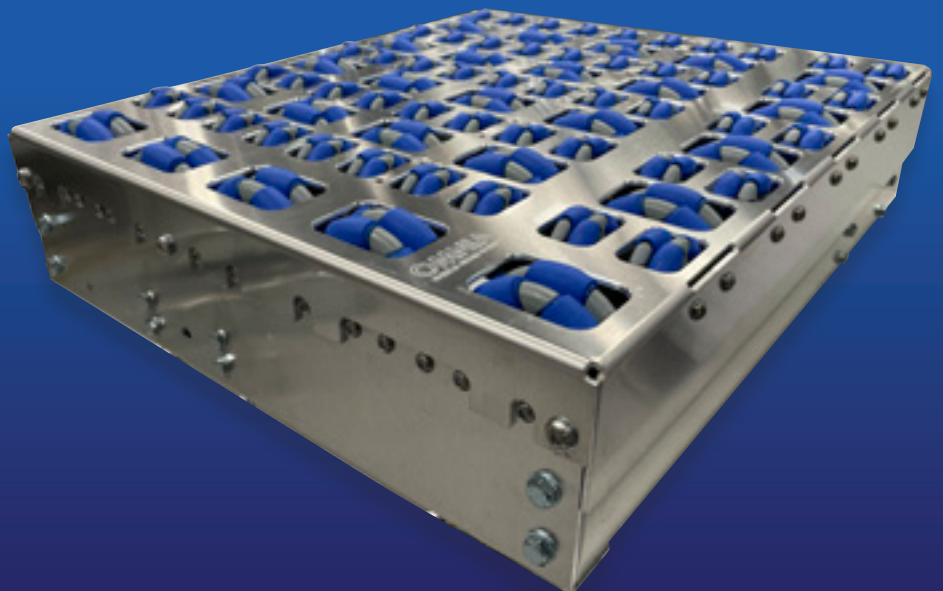
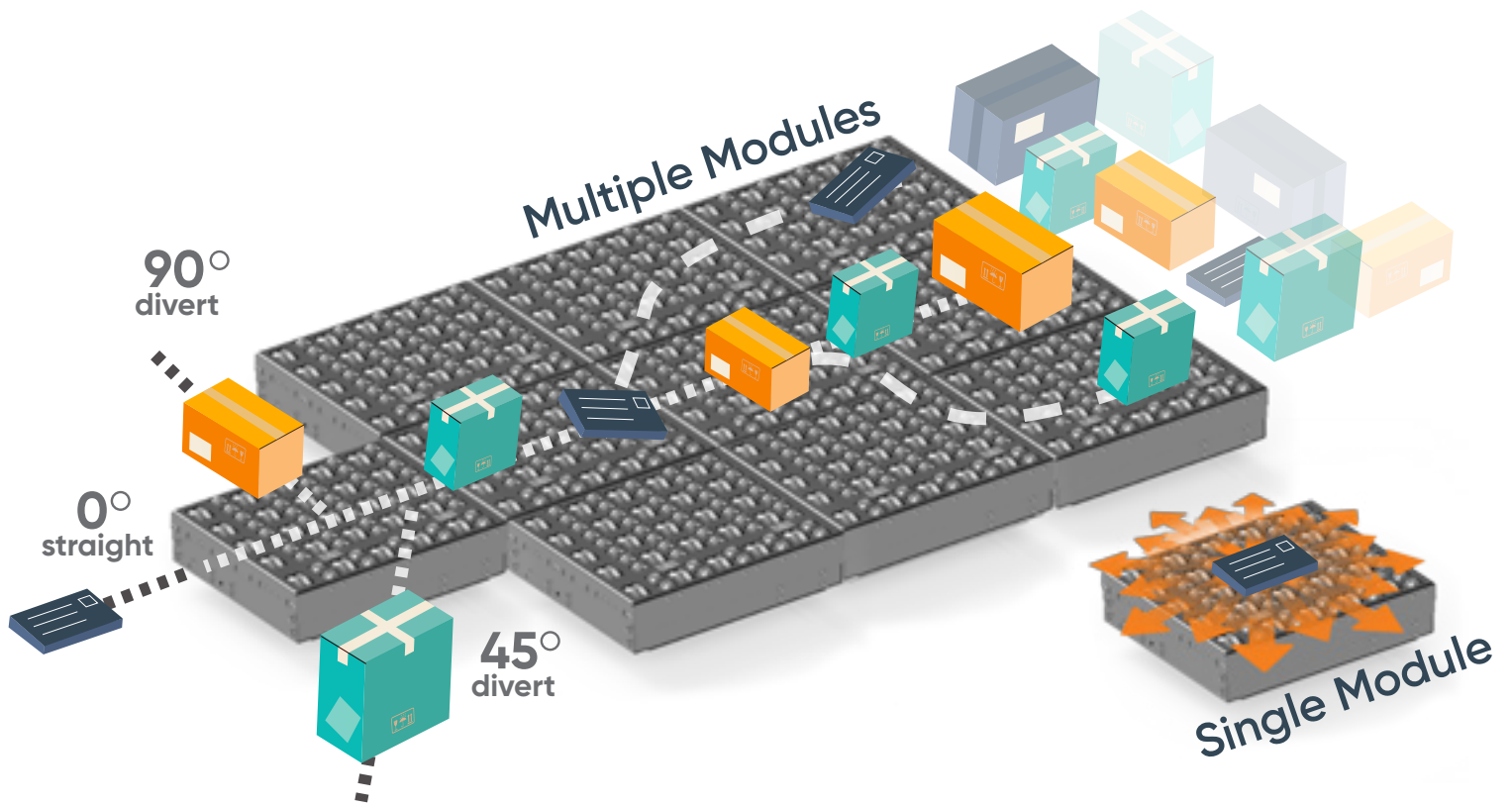
## LESS DOWNTIME

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.

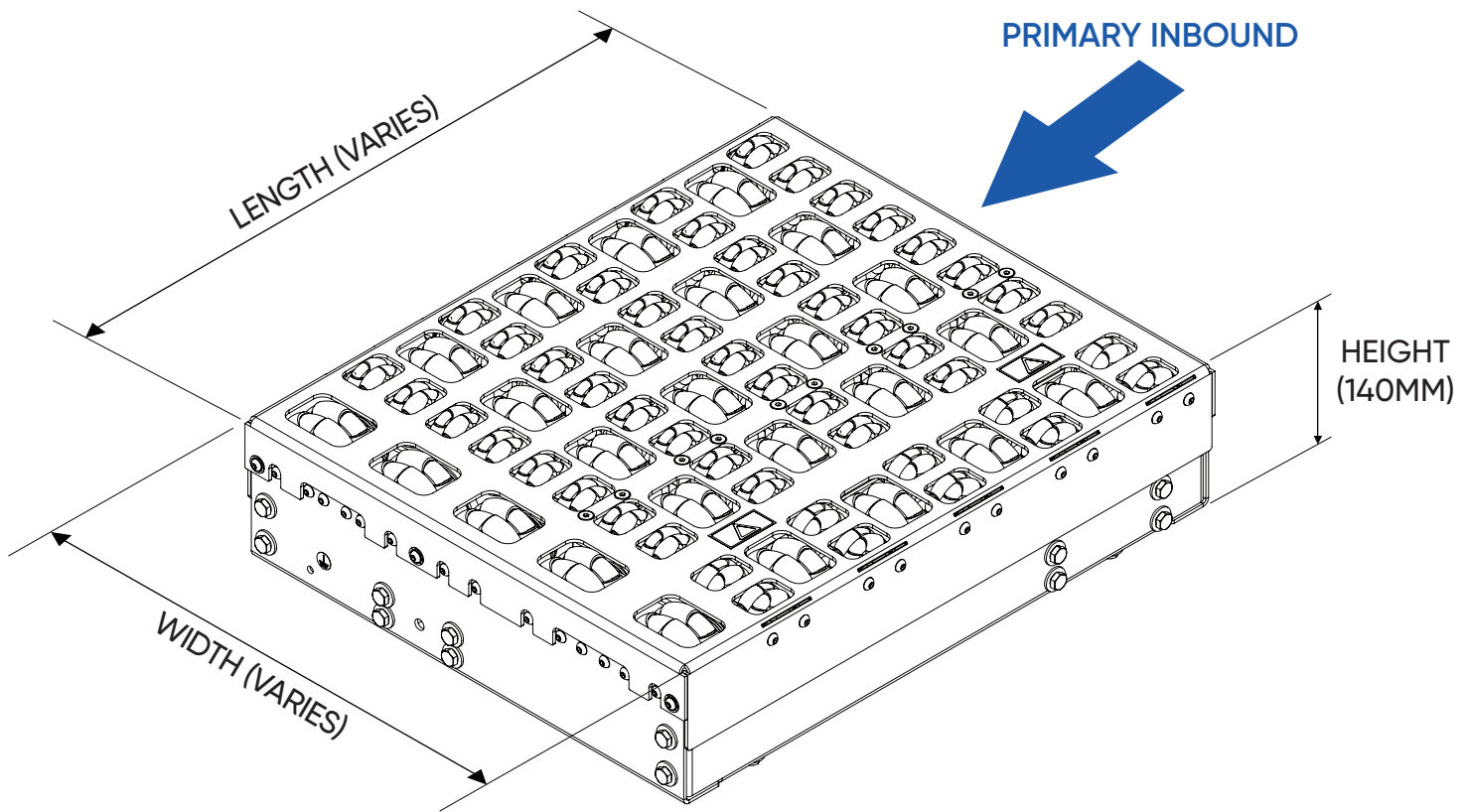
# SPACE SAVING SINGULATION

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





# OMNIA SORTATION SPECIFICATIONS



## Product Range

Model No.	11-5565	11-5566	11-5567	11-5595
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.

## Specifications

Load Capacity**	From 400g up to 30kg	
Max Line Speed	< 2m/s	
Divert Rate***	100% Hourly	2880*
	50% Hourly	4800*
Divert Angle	Any angle through 360°	
Power Supply	Requires 24V, max draw 2A, 8A breaker	
Package Sizing	> 150x150mm	

\*\* Systems can be scaled for loads.

\*\*\* Assuming 90° divert, 30kg payload, 1.5m/s line speed, -30<60C

Automation	2x Pulse Roller MDRs, 1x ConveyLinX ERSC	
Sound Level	64 dBA	
Environmental	Temp****	5 to 40C
	Ambient Temp Humidity	5 < 95%

\*\*\*\* Minimal humidity in freezing conditions

# 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

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# 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.**

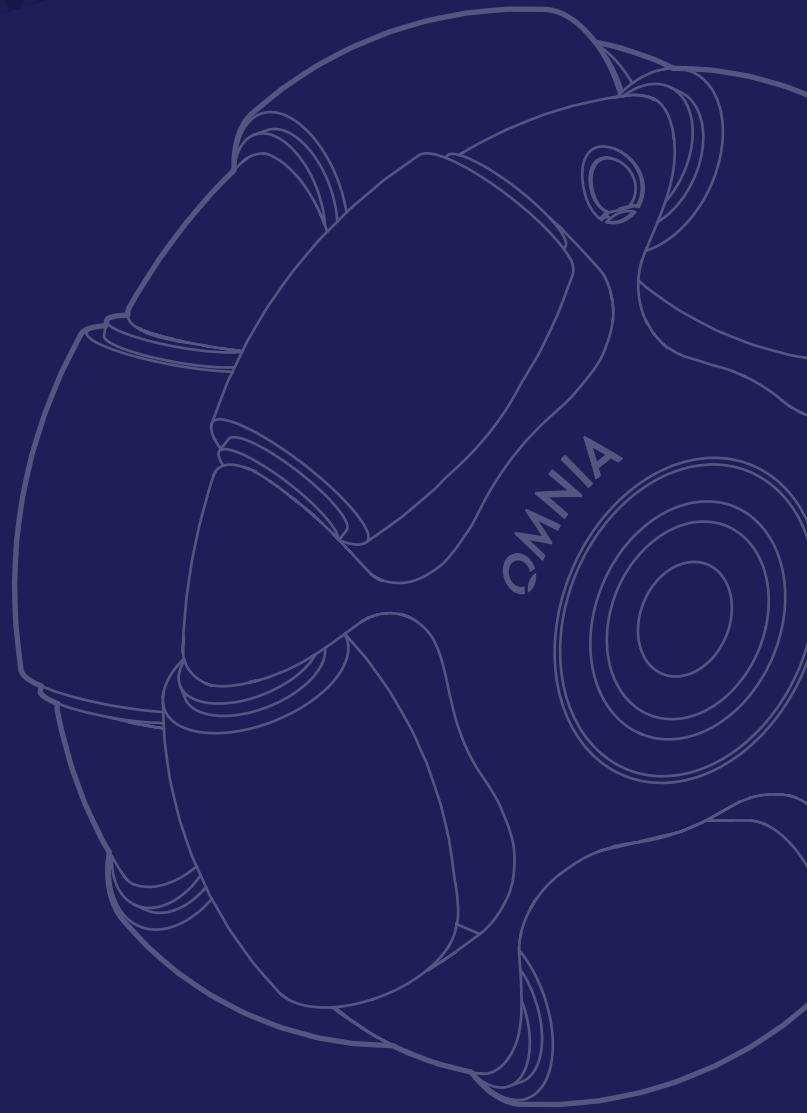
Member  
Since 2006





# OMNIA WHEEL

MAKING MOBILITY INTUITIVE



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