



# HELIUS OPTICAL SORTER

**Interested in a free demonstration  
with your own product or require more  
information?**

**Please contact us directly.**

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The Helius free-fall sorter is the perfect fit for growers and processors sorting nuts, dried fruit, (IQF) fruit and vegetables. The technology enables the removal of undesired discolorations, foreign material, defects, blemishes and contaminations invisible to the human eye.

## VERSATILE TECHNOLOGIES

With up to 12 individual laser signals, the Helius detects all **colour, structure defects** from a stream of good product. The Helius is also able to sort based on **biological characteristics**. Combined with TOMRA's patented FLUO™ technology, the Helius detects the slightest shades of **chlorophyll** to create an even better contrast between good products and defects. Other technologies available are SWIR comparing the objects' **water content**, and Detox™ for **afatoxin** detection.

## BENEFITS

- **Maximum efficiency in all conditions**
- **Calibration free**
- **Small footprint**
- **Upgradeable**
- **Self-learning**
- **Low maintenance**
- **Easy to operate**

## FAST & RELIABLE REMOVAL OF DEFECTS

After the inspection of the produce, the unwanted material is ejected via a **front or rear ejection system**. The manifold position before or behind the produce provides higher rejection accuracy, efficiency and more consistent sorting.



## WORKING PRINCIPLE

A feed shaker or hopper uniformly spreads the product over the free-fall chute. The product falls down towards the inspection zone, where it is scanned by lasers. A few milliseconds later the defects are hit with a precise powerful burst of air sending them into the rejection zone while the good product continues its natural free-fall.

## DIMENSIONS AND SPECIFICATIONS\*

Model	Dimensions				Utilities	
	Width	Length	Height	Infeed Elevation	Power	Air
<b>HELIUS 640</b>	2759 mm (109")	3433 mm (135")	2094 mm (82")	2904 mm (114")	1ph: 3kVA 3ph: 2,5kVA	29-87 psi 2-6 bar
<b>HELIUS P 640</b>	2759 mm (109")	2784 mm (110")	2486 mm (97,7")	2483 mm (98")	1ph: 5kVA	87-102 psi 6-7 bar
<b>HELIUS 1200</b>	3219 mm (127")	4198 mm (165")	2088 mm (94,8")	2088 mm (82")	1ph: 3kVA 3ph: 2,5kVA	29-87 psi 2-6 bar
<b>HELIUS P 1200</b>	3219 mm (127")	2997 mm (118")	2486mm (98")	2486 mm (98")	1ph: 5kVA	87-102 psi 6-7 bar
<b>HELIUS 1600</b>	3619 mm (142")	5546 mm (218")	2366 mm (93")	2366 mm (93")	1ph: 3kVA 3ph: 2,5kVA	29-87 psi 2-6 bar

\*Information shown for reference and may change depending on the actual application.