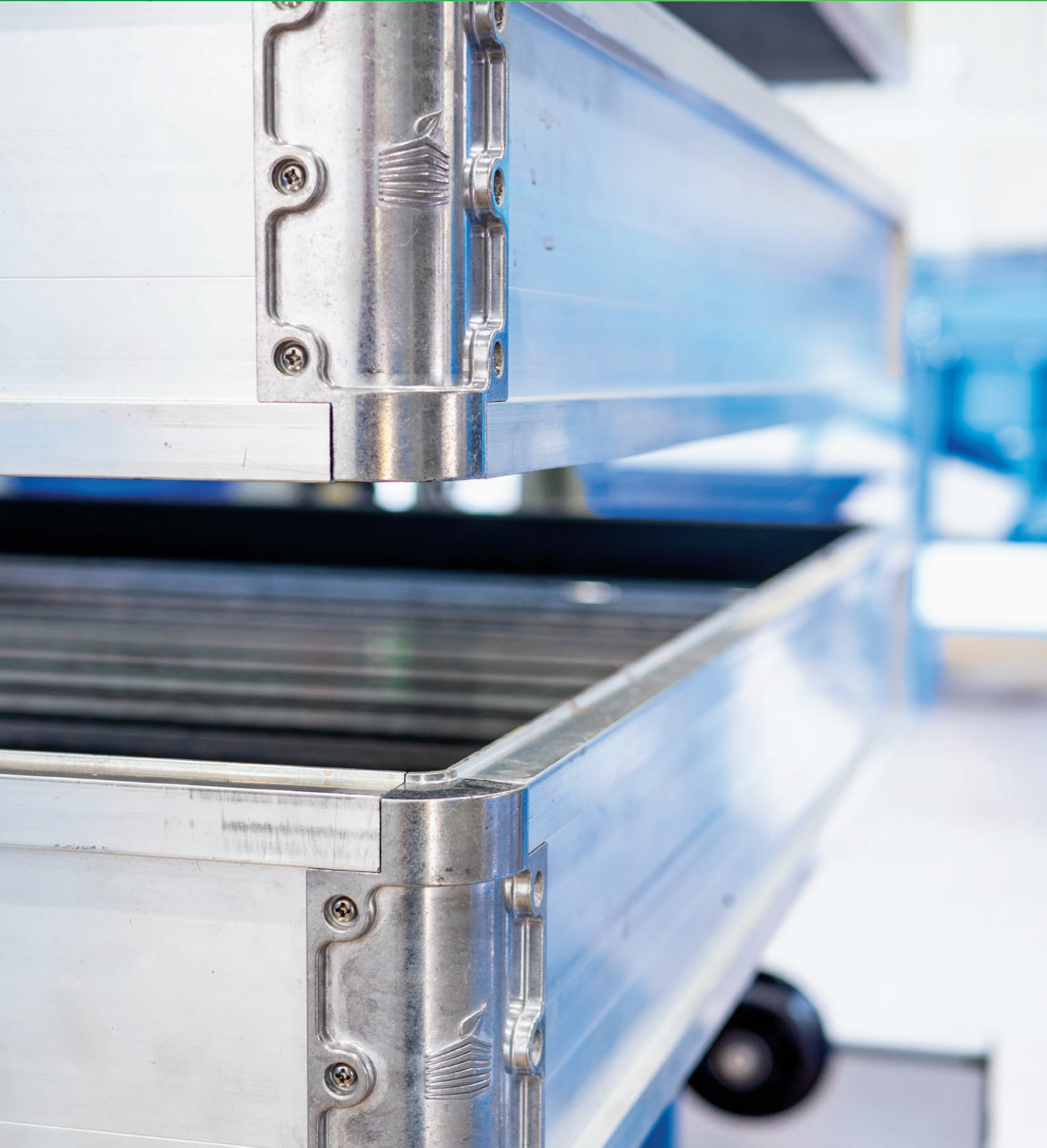




**vertical farm systems**  
*growing for the future*



# **AUTOMATED MULTI-LEVEL AGRICULTURE**





# THE XA SERIES AUTOMATED WAREHOUSE SYSTEM

After 9 years of intensive design, development and commercial testing Vertical Farm Systems proudly offers the XA Series Automated Growing System.

This unique modular system is optimised for low energy use, low water use & low labour input while still achieving high return on investment results.

Ideal for commercial production of leafy salad greens and herbs, as well as a large range of seedlings for both vegetable and ornamental varieties intended for open-field or green house planting.



## BASIC FEATURES

- ▶ Advanced Climate Cell growing environments with automated loading and unloading.
- ▶ Automated: seed & harvest, loading, unloading, bench wash and media recovery.
- ▶ Industry proven rolling bench system using flood & drain watering.
- ▶ All operations are computer managed from a single control station with minimal operator skills.
- ▶ Available in 28 size configurations to match any weekly harvest yield required.
- ▶ Optimised for reusable Clay Aggregate grow media and can be configured for other single use media.
- ▶ Suited to Bioponic Nitrate Free organic nutrients and compatible with other chemical based nutrients.
- ▶ Ideal for installation in warehouse buildings with a minimum internal clearance height of 20ft (6 m).
- ▶ Plug & Play maintenance with modular components allowing for easy upgrades and system expansion.



*"This unique modular system is optimised for low energy use, low water use & low labour input while still achieving high return on investment results."*





# YEAR ROUND FARMING WITH RELIABLE QUALITY AND YIELD

## INTEGRATED SYSTEMS

**AIR** – The insulated Climate Cell growing areas are monitored and managed to automatically ensure precise temperature and humidity levels as well as strong Biosecurity against all pests and diseases.

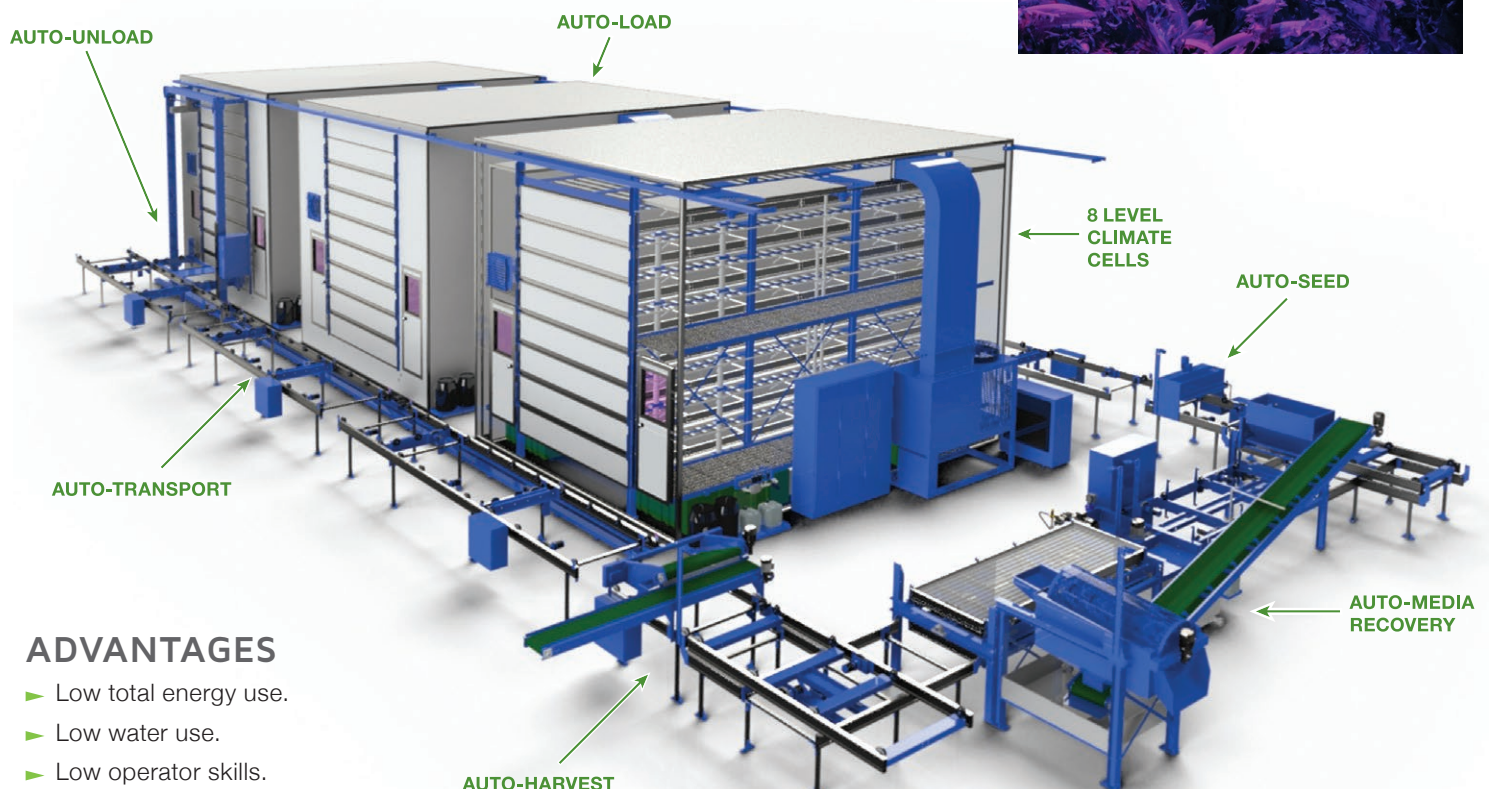
**WATER** – Plant transpiration recovery integrated into the climate cell system greatly reduces total water consumption. A wide range of growing nutrients can be used in the XA system with Bioponic live microbe organic being our recommendation for high crop yields and maximum nitrate-free nutrition to your customers.

**LIGHT** – The XA Series uses low-voltage LED Lighting system. The LED light rails are modular for simple maintenance and easy upgrades. Integrated water cooling promotes a typical luminaire lifespan of 3-5 years.

**GROW MEDIA** – The XA Series system is configured for reusable LECA clay pebbles with the addition of Vertical Farm Systems patented ion chelate nutrient additive. The systems can also be configured for single-use grow media including peat moss, biochar, coco peat or Rockwool as well as seedling mix substrates in trays.

## SUITABLE CROP EXAMPLES

- |                      |                |
|----------------------|----------------|
| ▶ Loose Leaf Lettuce | ▶ Pak Choy     |
| ▶ Baby Spinach       | ▶ Bok Choy     |
| ▶ Rocket (Arugula)   | ▶ Salad Mizuna |
| ▶ Mizuna             | ▶ Beet Chard   |
| ▶ Tatsoi             | ▶ Coriander    |
| ▶ Endive             | ▶ Parsley      |
|                      | ▶ Basil        |



## ADVANTAGES

- ▶ Low total energy use.
- ▶ Low water use.
- ▶ Low operator skills.
- ▶ Fully automated operation.
- ▶ Scalable to suit any market size.
- ▶ Low voltage water-cooled LED lighting.
- ▶ Optional CO<sup>2</sup> enrichment for maximum yields.
- ▶ Suitable for vegetable & ornamental seedlings.

# VERTICAL FARM SYSTEMS – ENGINEERED FOR YOUR PROFITS

## XA SERIES CONFIGURATION

There are 28 sizes of XA Series available to suit any weekly harvest required.

XA158	MODEL NAME	NO. OF CELLS	GROW AREA		FLOOR AREA	
			m <sup>2</sup>	ft <sup>2</sup>	m <sup>2</sup>	ft <sup>2</sup>
	XA158-1	1	158	1,701	260	2,799
	XA158-2	2	316	3,401	375	4,036
	XA158-3	3	474	5,102	490	5,274
	XA158-4	4	632	6,803	605	6,512
	XA158-5	5	790	8,503	720	7,750
	XA158-6	6	948	10,204	835	8,988
	XA158-7	7	1,106	11,905	950	10,226

XA316	MODEL NAME	NO. OF CELLS	GROW AREA		FLOOR AREA	
			m <sup>2</sup>	ft <sup>2</sup>	m <sup>2</sup>	ft <sup>2</sup>
	XA316-1	1	316	3,401	385	4,144
	XA316-2	2	632	6,803	555	5,974
	XA316-3	3	948	10,204	725	7,804
	XA316-4	4	1,264	13,606	895	9,634
	XA316-5	5	1,580	17,007	1,065	11,464
	XA316-6	6	1,896	20,408	1,235	13,293
	XA316-7	7	2,212	23,810	1,405	15,123

XA474	MODEL NAME	NO. OF CELLS	GROW AREA		FLOOR AREA	
			m <sup>2</sup>	ft <sup>2</sup>	m <sup>2</sup>	ft <sup>2</sup>
	XA474-1	1	474	5,102	507	5,457
	XA474-2	2	948	10,204	731	7,868
	XA474-3	3	1,422	15,306	955	10,280
	XA474-4	4	1,896	20,408	1,179	12,691
	XA474-5	5	2,370	25,510	1,403	15,102
	XA474-6	6	2,844	30,613	1,627	17,513
	XA474-7	7	3,318	35,715	1,851	19,924

XA632	MODEL NAME	NO. OF CELLS	GROW AREA		FLOOR AREA	
			m <sup>2</sup>	ft <sup>2</sup>	m <sup>2</sup>	ft <sup>2</sup>
	XA632-1	1	632	6,803	612	6,588
	XA632-2	2	1,264	13,606	883	9,505
	XA632-3	3	1,896	20,408	1,154	12,422
	XA632-4	4	2,528	27,211	1,425	15,339
	XA632-5	5	3,160	34,014	1,696	18,256
	XA632-6	6	3,792	40,817	1,967	21,173
	XA632-7	7	4,424	47,620	2,238	24,090



## OUR COMPANY vertical farm systems growing for the future

Founded in 2009 Vertical Farm Systems is a privately owned Australian company with a dedicated team involved in the design, development and marketing of world-class automated multi-level growing systems for the commercial production of food in all environments and locations.

We welcome you to become a part of this exciting sector that is at the forefront of agricultural technology.

FOR INFORMATION ABOUT VERTICAL FARM SYSTEMS  
Please visit [www.verticalfarms.com.au](http://www.verticalfarms.com.au)

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Due to continuous technology improvements specifications are subject to change without notice

