



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

# CONTROLLED ENVIRONMENT AGRICULTURE



# THE XA SERIES AUTOMATED VERTICAL FARMING SYSTEM

After 5 years of development and commercial testing Vertical Farm Systems offers the XA Series Growing System.

Optimised for low operator skills, low water use and low labour input while 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

- Automated growing system which integrates a proven rolling bench system with advanced multi-level Climate Cell growing environment, robotic seeding and automated harvesting functions.
- Fully scalable to any size or harvest yield required. Installation can be into a typical industrial warehouse type structure with a minimum internal clearance height of 4.5 metres.
- All operations are computer managed from a single intuitive touchscreen which requires minimal operator skills.
- Maintenance is based on a “Plug & Play” system with modular components and requiring minimal operator skills while allowing for easy upgrades and system expansion.



- Low Total Energy Use
- Low Water Use
- Low Operator Skills
- Fully Automated Operation
- Scalable to Suit Any Market Size
- LED Lighting – Programmed Wavelength Control
- CO<sup>2</sup> Enrichment for Maximum Crop Performance
- Designed for Ready to Harvest Crops or Vegetable & Ornamental Seedlings



## SUITABLE CROP EXAMPLES

### Salad Greens

- Loose Leaf Lettuce
- Baby Spinach
- Wild Rocket
- Tatsoi
- Endive
- Pak Choi
- Salad Mizuna
- Beet Chard
- Mustard Greens

### Herbs

- Basil
- Parsley
- Coriander





# YEAR ROUND FARMING WITH RELIABLE QUALITY AND YIELD

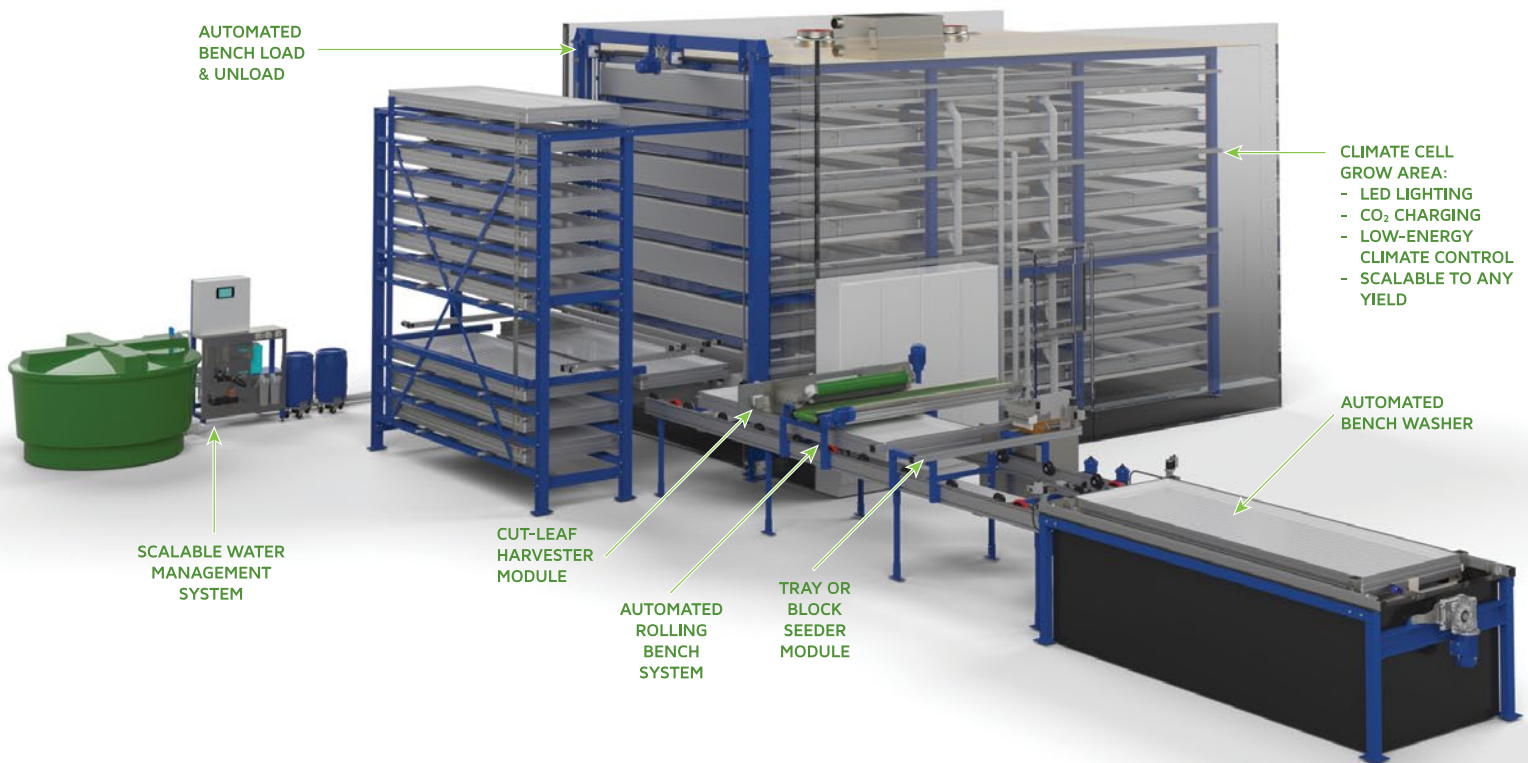
## INTEGRATED SYSTEMS

**AIR** – The Climate Cell growing enclosure is fully insulated and designed to automatically ensure precise temperature and humidity control as well as optimum Bio-security and CO<sup>2</sup> enrichment for maximum crop yields and plant health.

**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 Vertical Farm Systems Bioponic organic nutrient being our recommendation for giving high crop yields and maximum nutritional benefit.

**LIGHT** – The XA Series uses Vertical Farm Systems patented low-voltage LED Lighting system which is fully pre-programmed with wavelength adjustment according to each plant variety and stage of growth. The LED light rails are modular for simple maintenance with a typical lifetime of 3-5 years.

**GROW MEDIA** – The XA Series system can be adapted to use individual blocks of black peat, biochar, coco peat or Rockwool as well as seedling mix substrates in trays.



# VERTICAL FARM SYSTEMS ~ LEADING THE WAY IN AGRICULTURAL TECHNOLOGY

Following extensive research into critical issues of food reliability, available arable land, loss of water resources and the increasing demand for food importation the team at Vertical Farm Systems has developed intelligent systems to provide a practical solution for global food production.

The privately owned company employs a dedicated team of professionals committed to the ongoing development and deployment of world-class enclosed growing systems for the commercial production of food in all environments and locations.

Be a part of an agricultural revolution that is committed to bioptonically produced food, advanced system integration and crop growth management that is at the forefront of agricultural technology.

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

## **Vertical Farm Systems Pty Ltd**

ABN 84 136 780 857

**T.** 0400 186 707

**E.** [sales@verticalfarms.com.au](mailto:sales@verticalfarms.com.au)

**Int.** (+61) 400 186 707

**A.** PO Box 415, Palmwoods, Qld Australia 4555



© Copyright 2014, Patent Pending

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