

A vertical farming system with two towers of green leafy plants. A central vertical pipe with a blue valve is visible between the towers. The background is a white wall with some equipment.

# Hydra PFM

(Prefabricated Farm Modules)

# E-X-P-A-N-D

# YOUR SPACE!

# HYDRA BIOTECH



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# Why Container Farms?

## Benefits

- Easy to ship
- Quick to setup
- Rugged, weather and pest proof
- Reliable production
- Stackable for even higher density

## Limitations

- Constrained elbow room
  - Storage area not included
  - Changing area not included
  - Work area conjoined with growing area

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# Hydra's PFM

Hydra Biotech utilized mature Containerized Housing industry solutions and integrated the best Indoor Farming technologies.

Providing both standardized and custom builds for customers all over the world.

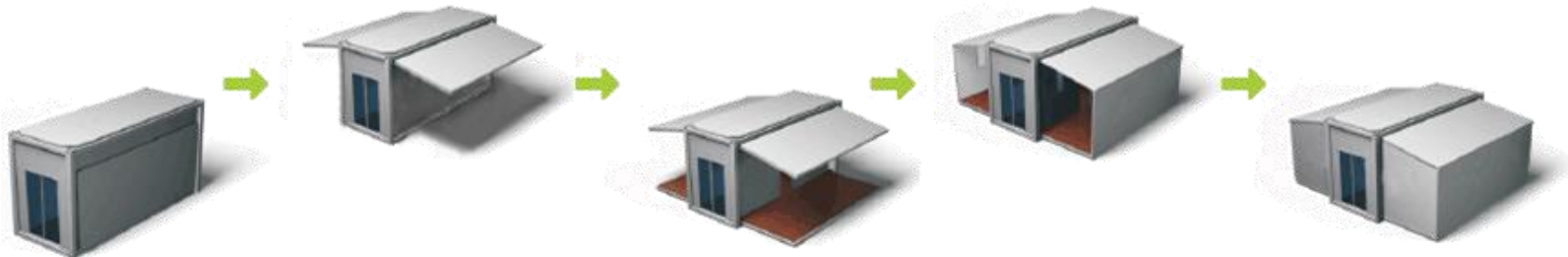
In addition to veggie farming, customers use different ICC modules for mushrooming, vining plants, microgreens, storage, off-grid power, water capture, even housing. The possibilities are endless.



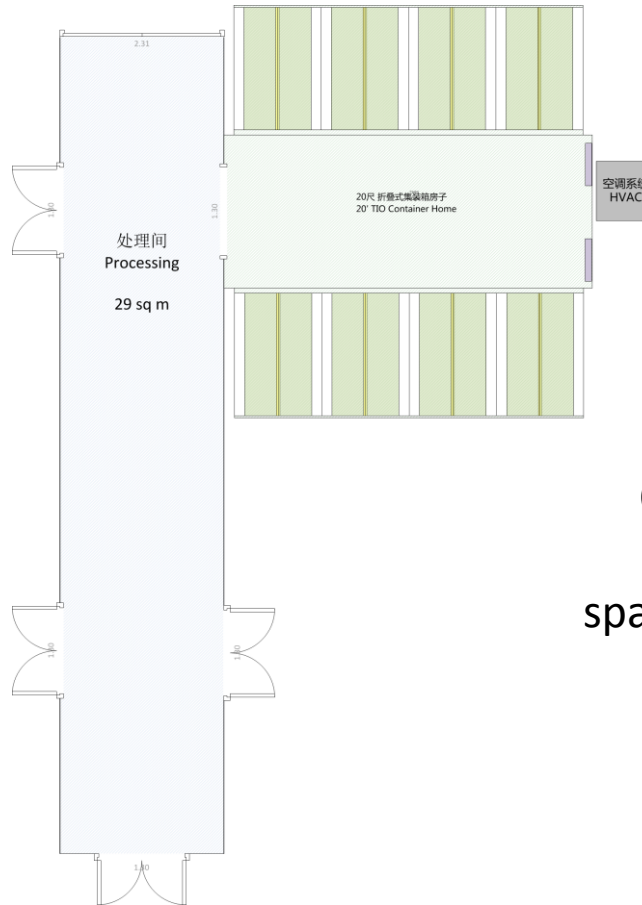
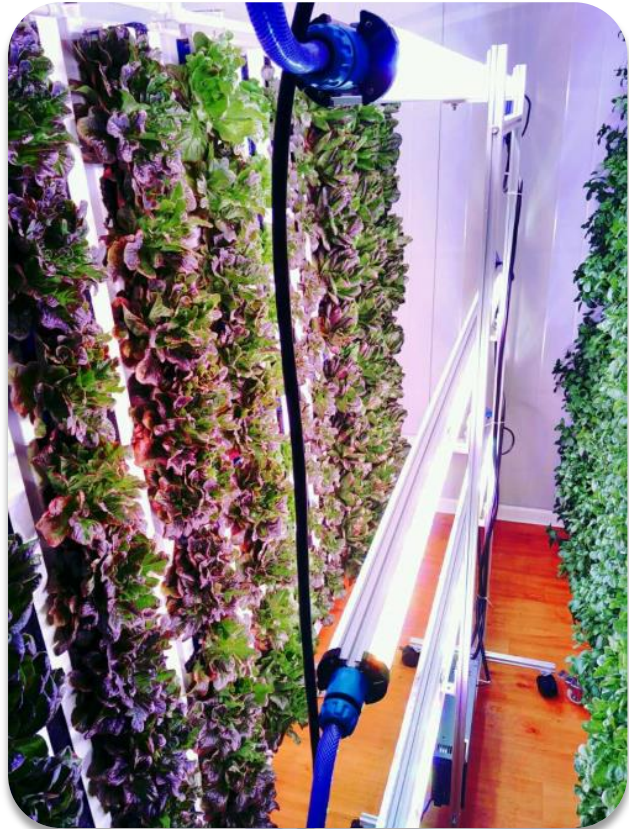


# How We Roll...

1. Ship one 40' Shipping Container to site
2. **Extract, Connect and Expand** Containers
3. Assemble sub-assemblies



# Achieve True Modularity



**The Minimalist**  
Half 40' Container Load

Total of **60 sqm**

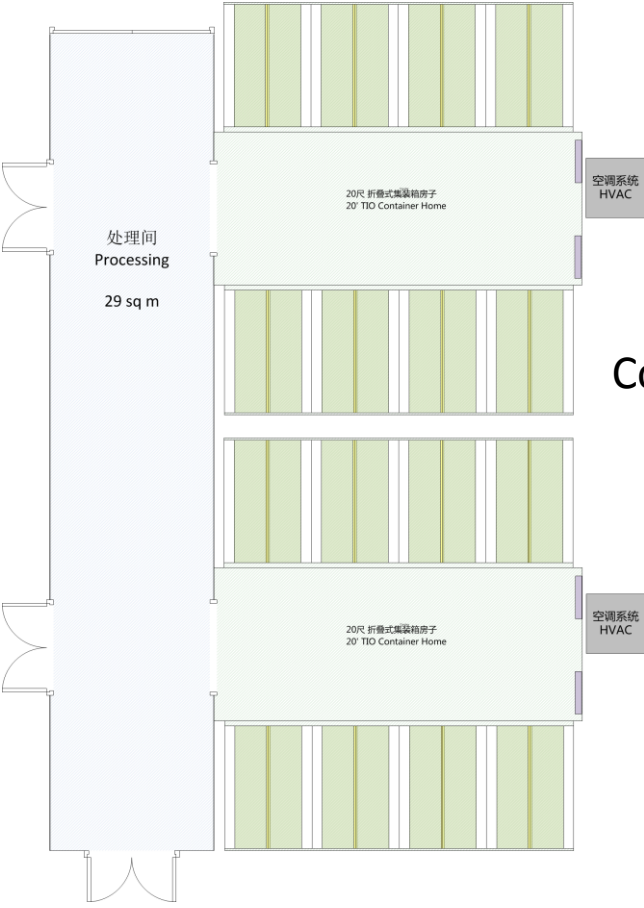
1 Independent Climate  
Controlled Farm Module

Optional: Ship insulation  
panels for 40' in unused  
space for onsite installation





# Achieve True Modularity



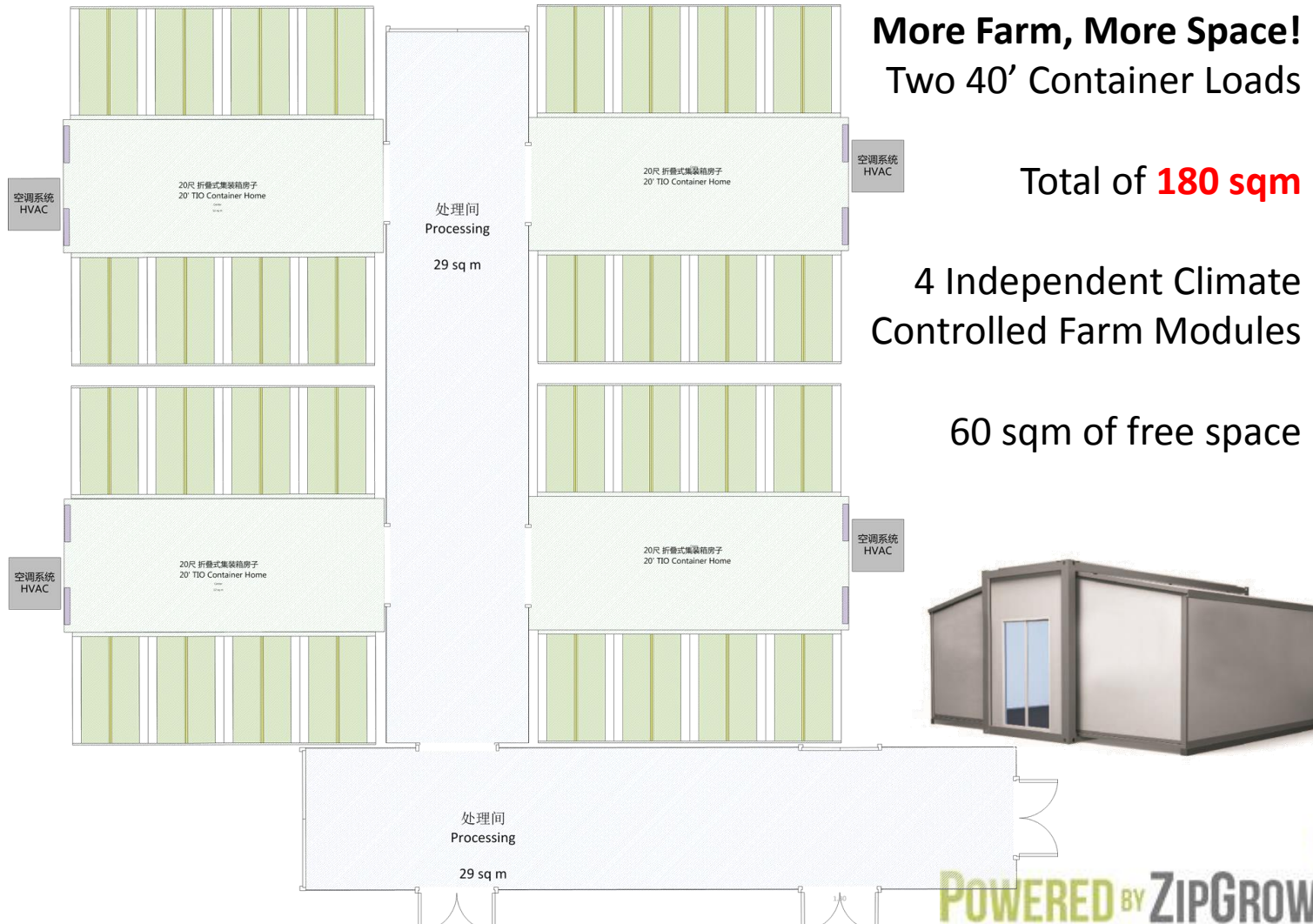
**Maximum Value**  
One 40' Container Load

Total of **90 sqm**

2 Independent Climate  
Controlled Farm Modules



# Achieve True Modularity







**HYDRA**  
BIOTECH LIMITED

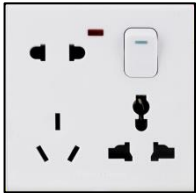


**GP Module** (General Purpose)

ISO Standard 40' HC Shipping Container Format



# ICC Module (Independent Climate Controlled)

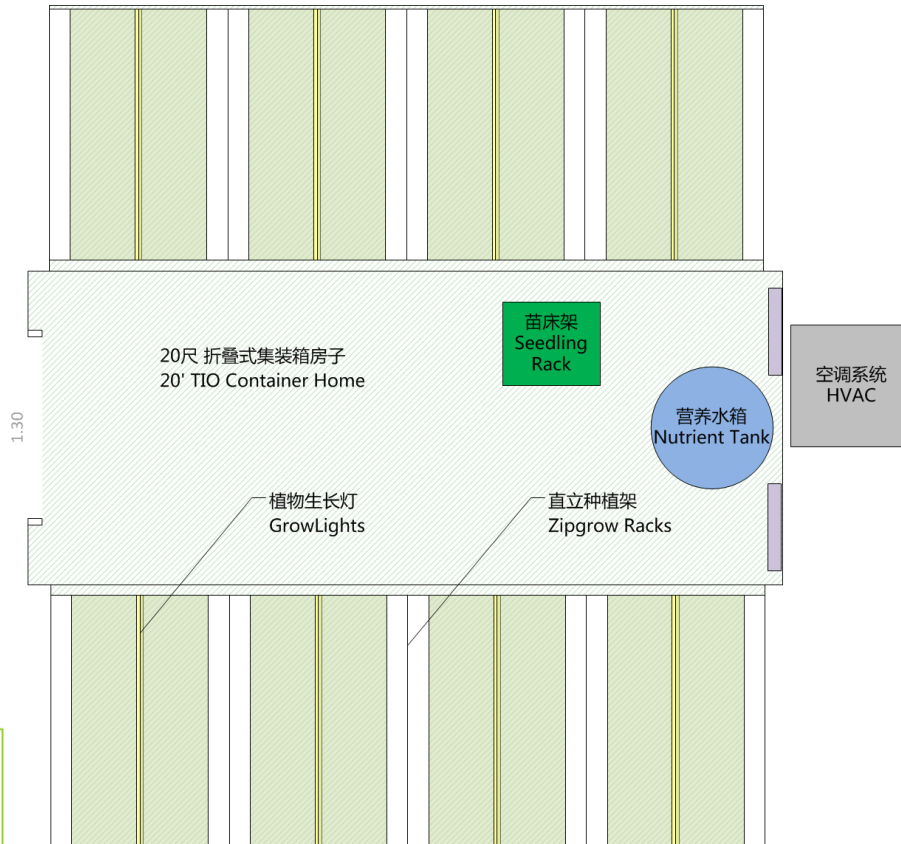


26 x 220VAC 10A Wall Plugs  
(International)

**32 sqm** internal space

Independently wired for maximum control:

- Nutrient Reservoir Pump
- Sump Pumps
- HVAC/Dehumidifier
- Grow Lights
- CO2 Enhancement
- Room Lighting
- Security Cameras



- 3 Phase Input 380VAC



# ICC Module (Independent Climate Controlled)

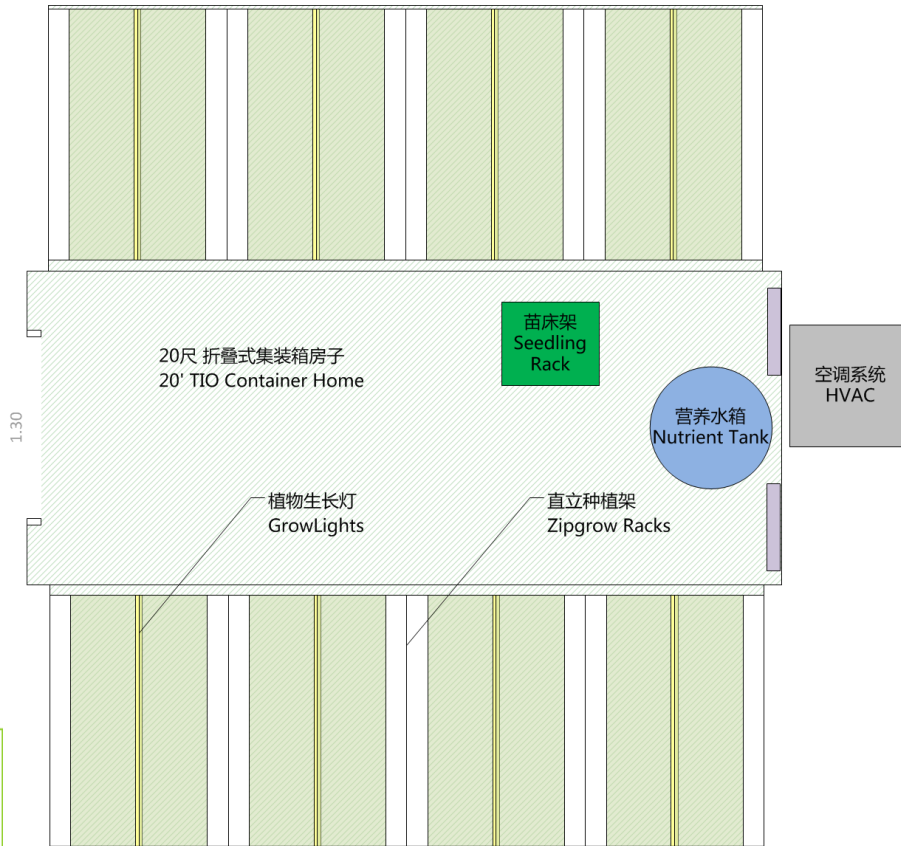
 **32 sqm** internal space

We recommend using 24 x 350W water-cooled Coolbar™ for maximum light without the heat!

Up to **240** Zipgrow towers for maximum growing area; **2640-3120** plant spaces

Easily converted for other crops; Cucumbers and Tomatoes vines in Dutch Buckets, Mushrooms, Microgreens, etc.

Automated Mobile Seedling Rack Stack



# Advantages of Hydra PFM

- Quick Setup
  - 1-2 days
- Efficient Shipping
  - Use and Recycle everything, including the 40 foot “Packaging”
- More Space
  - 90 sqm delivered with one ISO Standard 40’ shipping container
- Weather Proof and Durable
  - Lasts for more than 10 years
  - Designed from ground up for field maintenance
- True Modularity
  - Repurpose Farm Modules for custom needs; Veggies, Microgreens, Tomatoes and Cucumbers
  - Tailor your growing environments (and nutrients) to your different crops!
- Everything you need in one container
  - Farming hardware, tools, spares and even comes with storage space!





# Loading PFM for Shipping



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# Hydra PFM FAQ

## Inputs

- Seeds, Water, Power, CO<sub>2</sub> and a little effort from you

## Power

- 380VAC Three Phase input for max. efficiency
- Veggie configuration uses about 100 KWh per day (light and HVAC)
- R16 insulation for more energy savings and hostile environments
  - \* Can be upgraded to R22

## OPEX

- 65-85% percent of running costs come from energy bills

## Order Lead Time

- 4-6 weeks for standard ICC modules

## What can be grown?

- Veggies, Herbs, Microgreens, Tomatoes, Cucumbers, Mushrooms

## What other Modules are there?

- Other than the standard GP, ICC and BTS (Basic 3-in-One Shell) modules, any combination can be made. **We provide custom build services too.**

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# About Us



Tristan Lim  
Co-Founder 

15 yrs in IT  
Google East Asia Corp IT Manager  
CEIBS MBA Class of 2006



Jim Hsieh  
Co-Founder

15 yrs in Food Processing  
Goldencrops China CEO  
CEIBS MBA Class of 2006



Steven Khoo  
Co-Founder 

12 yrs in Industrial Automation  
NOL-Tec China GM  
CEIBS MBA Class of 2007

2000: Dr. Nate Storey started developing Zipgrow technology

2007: Bright Agrotech was started by Dr. Storey

2013: Tristan Lim started manufacturing Zipgrow products for Asian markets

2014: Formalized Sales and Distribution with Bright Agrotech

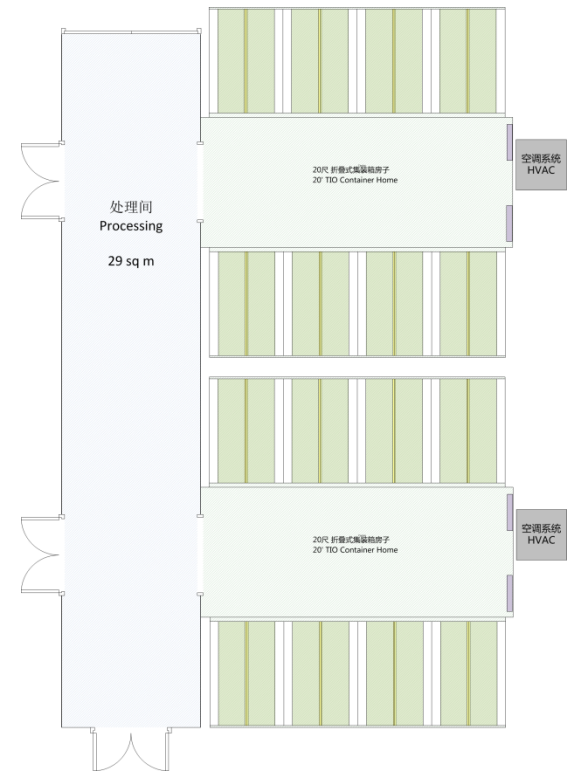
2015: Founded Hydra Biotech Co., Ltd to build custom PFMs





# Contact Us

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