



Farmony

RADIX
BY GROWERS, FOR CROPS



HIGHLIGHTS

- Modular vertical farming solutions
- Hybrid system of NFT & DWC with integrated gravity-driven water circulation
- Convertible between constant flow and Ebb & Flow
- Built-in horticulture lighting fixtures
- Supports all stages and varieties of plant growth
- Can be assembled in less than 30 minutes



Farmony from Life aHead LTD 2020, Unit 5a Stadium Business Park, Ballycoolin, Dublin



FLEXIBILITY	<ul style="list-style-type: none"> • Customizable from 4 - 8 layers • Crops grown on a horizontal plane • Layer spacing can be customized upon order
MODULARITY	<ul style="list-style-type: none"> • Footprint of each individual "module" is 3' x 4' (1m²) • Modules can be interconnected into clusters • Stackable grow beds, easy for storage and shipping
VERSATILITY	<ul style="list-style-type: none"> • Covers different stages of crop development: germination, seedling, vegetative • Ideal for a large variety of crop cultivation

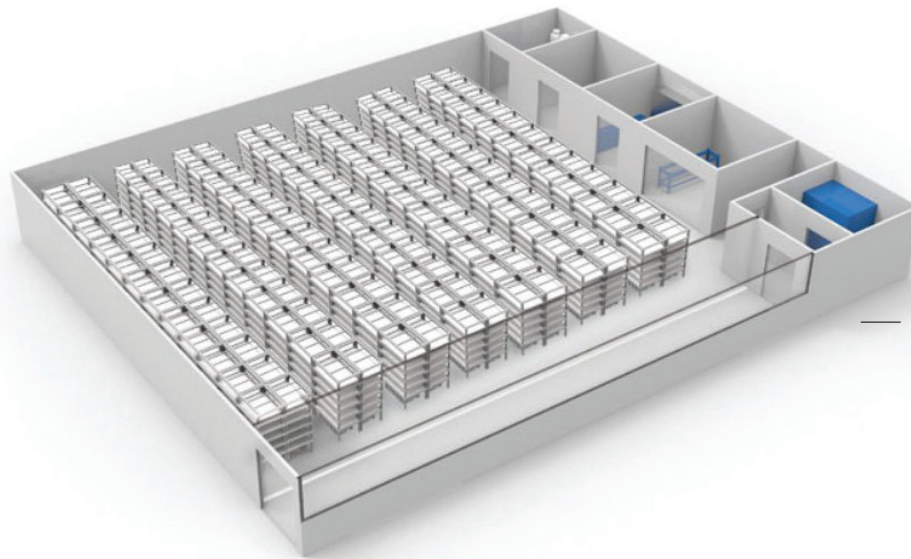
MORE THAN 200 VARIETIES OF CROPS TESTED

	<p>LETTUCE</p> <p>Bibb, Butterhead Leaf, Oakleaf, Romaine, Summer Crisp, Salanova</p>		<p>ASIAN GREENS</p> <p>Bok Choy, Baby Bok, Specialty Varieties</p>		<p>HERBS</p> <p>Amaranth, Basil, Celery, Cilantro, Crown Daisy, Shiso</p>
	<p>MIXED GREENS</p> <p>Endive, Kale, Radish, Spinach, Swiss Chard</p>		<p>BABY LEAF</p> <p>Asian Greens, Garnish Greens, Spicy Greens, Sweet Lettuce</p>		<p>MICRO GREENS</p> <p>Pea, Sunflower</p>

PLANT SITES & GROW AREA ESTIMATION

LAYERS	# OF MODULES	SQM FOR GROWING *	# OF PLANT SITES FOR LEAF LETTUCE	# OF PLANT SITES FOR HERBS	# OF 10X20 MICROGREEN TRAYS
4	1	5.2	216	2,880	24
4	100	520	21,600	288,000	2,400
4	200	1,040	43,200	576,000	4,800
4	500	2,600	108,000	1,440,000	12,000

* Actual yield varies significantly depending on the building layout and grower's operation.



CONFIGURATION GUIDE

PRODUCT	P/N	LAYER	LIGHT-TO-BED HEIGHT (MM)	DIMENSIONS (MM)	COLOR	POWER (W)	TYPICAL PPFD AT PLANT SITES ($\mu\text{MOL}\cdot\text{S}\cdot\text{1M}^2$)
Microgreen Module	ZKM12-CE09A/L04H25/WT 4		250	1346x942x2665	White	540	200
Vegetative Module	ZKM12-CE10B/L04H30/WT 4		300	1346x942x2545	White	540	250



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SPECIFICATIONS

CATEGORY	ITEM	DATA	METRIC	DATA	US
GROW BED	Outer Length	1.346	[m]	4.42	[ft]
	Outer Width	0.942	[m]	3.09	[ft]
	Grow Space Length	1.2	[m]	3.94	[ft]
	Grow Space Width	0.9	[m]	2.95	[ft]
	Light-to-bed Height ¹	25/30	[m]	10/12	[in]
	Number of Stackable Layers	4 - 8		4 - 8	
	Material	Food-grade PP			
	Maximum Load per Grow Bed	27	[kg]	60	[lb]
	Net Weight	13.5	[kg]	5.4	[lb]
GROW LIGHTS	Number of Lights per level	8	[#]	8	[#]
	Tube Length	900	[mm]	3	[ft]
	Beam Angle	120	[°]	120	[°]
	Photosynthetic Photon Flux (PBAR)	23/28	[μmol/s]	23/28	[μmol/s]
	Supply Voltage	100 - 277	[V]	100 - 277	[V]
	Supply Frequency	50/60	[hz]	50/60	[hz]
	Power Consumption	11.5/13.5	[W]	11.5/13.5	[W]
	LED Lifetime ²	36,000	[hrs]	36,000	[hrs]
	IP Rating	IP65		IP65	
	Certifications	CE/ETL		CE/ETL	
	POWERRAFT™	Number of Rafts per grow bed	2	[#]	2
Raft Length		900	[mm]	2.95	[ft]
Raft Width		600	[mm]	1.97	[ft]
Raft Depth		30	[mm]	1.18	[in]
Number of Plant Sites per Raft		27/54/180	[#]	27/54/180	[#]
Plant Site Diameter		25	[mm]	0.98	[in]
Material		Food-grade PP			
Net Weight		2	[kg]	4.4	[lb]
WATER CIRCULATION	Circulation Volume per Layer - Deep Mode	30	[L]	8	[G]
	Circulation Volume per Layer - Shallow Mode	15	[L]	4	[G]
	Return Fittings OD	40	[mm]	1.57	[in]
	Operating Flow Rate	3.8	LPM	1	GPM

1. Height can be customized upon order

2. Tested at degradation to 90% of initial output



All specifications are subject to change.

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