

Container Technical Data Sheet

Items	Description	
Container		
	Dimensions	40' x 8' x 9.5'
	Insulation	R-28 Department of Energy Insulation Rating
BARD Climate Control Unit		
	Air Conditioner	3 ton 36,000 BTU Max. Packaged unit with integrated dehumidifier & economizer
	Economizer Air Intake	1,100 CFM
	Moisture Reclamation	1.88 gal. / hour at 75oF, 65% relative humidity
	A/C Efficiency Rating	11.0 EER
	A/C Refrigerant	R-410A
	A/C Certifications	AHRI, ETL
	A/C Coil Style	Aluminum-finned copper
Fans		
	Exhaust Air Speed	141 CFM
	Air Exchange Rate	Up to 6 exchanges/hour
	Overhead Fan Ventilation	880 CFM
	Ducted Fans Ventilation	473 CFM
	Ducted Fans Diameter	8 in.
CO₂ Regulator		
	Regulator	Precision Regulator with Heavy-Duty Solenoid Valve

Items	Description	
LEDs		
Overview		
	Red LED Photosynthetic Wavelength	660nm
	Blue LED Photosynthetic Wavelength	450nm
	LED Board Waterproof Rating	IP65
	LED Diode Blended Efficiency	2.7 $\mu\text{mol}/\text{joule}$
Nursery Station		
	Number of LED Boards	8
	LED Boards Dimensions	4.3 in x 43.3 in
	LED Array Intensity	200 $\mu\text{mol}/\text{m}^2\text{s}$ average
	LED Array Ratio	4:1 red / blue
	LED Wattage	164W per trough, 328W per station
Cultivation Area		
	Number of LED boards	112
	Number of LED Arrays	4
	LED Boards Dimensions	38.5 in x 13.75 in
	LED Array Intensity	250 $\mu\text{mol}/\text{m}^2\text{s}$ average
	LED Array Ratio	5:1 red / blue
	LED Wattage	2,030W per array, 8,120W total
Worktable & Nursery Station		
Nursery Station		
	Seedling Capacity	Up to 4,608

Items	Description	
	Seedling Tray Capacity	16 200 or 288-cell trays
	Number of Seedling Troughs	Two full-width seedling troughs
Worktable		
	Table Dimensions	90 in x 27 in x 43 in
	Table Construction	TIG-welded stainless steel
Hydroponics		
Irrigation		
	Circulation Pump Filtration	6 Nylon Monofilament Meshes
	Aeration System	793 gal. / hr. fluid oxygenator
	Mesh Rating	75 micron
	Number of Peristaltic Dosing Pumps	8
	Peristaltic Dosing Pumps Flow Rate	50 mL/min
Nursery Station		
	Hydroponic System	Ebb and flow configuration
	Seedling Tank Capacity	38 gal.
Cultivation Area		
	Hydroponic System	Overhead drip configuration
	Main Tank Capacity	110 gal.
	Plumbing	NSF61 PVC
	Drip Emitters	Self-flushing, clog-resistant

Items	Description	
	Drip Emitter Flow Rate	2 gallons/hour
Plant Panels & Adjustable Rows		
Plant Panel		
	Plant Panel Design	5-channel
	Plant Panel Construction	High impact polystyrene
	Plant Panel Growing Medium	Inert reticulated foam
	Total Number of Panels	88
	Total Number of Channels	440
	Combined Linear Growing Space	36,960 in/ 3,080 ft/ 3.6 acres
Adjustable Rows		
	Number of Grow Rows	4
	Adjustment System	Rack and pinion
	Rack System Load-bearing Capacity	1,300 lbs max.
	Number of Frames	3
	Frame Construction	Aluminum
	Track Construction	Anodized aluminum
	Carriage Construction	Anodized aluminum, rubber-coated wheels
Tech		
Grow Controller		
	Number of Controlled Outputs	32
	Number of Spare Outputs	1

Items	Description	
	Number of Controlled Inputs	8
	Number of Spare Inputs	6
	Zones & Sensors	2 Hydro zones (pH, EC, and temperature sensors) 1 Climate zone (Temp, RH%, CO ₂) 2 Water level sensors (Nursery Station Tank, Cultivation Area Tank)
farmhand®-Connected Camera		
	Number of Cameras	1 Amcrest ProHD Shield Wireless IP Security Camera
	Camera Data Storage	MicroSD and Cloud Storage
	Camera Resolution	960P 1.3 Megapixel (1280*960P) 140° Viewing Angle Digital Zoom & Night Vision
Bluetooth® Speakers		
	Number of Speaker	2 Dayton Audio IO525 Speakers
	Speaker Connection	Bluetooth®-connected
	Speaker Construction	Weather resistant ABS plastic enclosure and aluminum grills Polypropylene 5-1/4" woofer Metalized Mylar 1" dome tweeter