Canobi Drop-n-Grow™

Modular Indoor Farming Platform – Technical Specifications

System Overview:

The Canobi Drop-n-Grow™ is the industry's most advanced modular indoor farming platform, delivering 40% more cultivation area than traditional container farms, with scalability from a single module to a complete facility.

Key Advantages:

- 40% more grow area vs. container farms
- 33% more usable floor space
- 2,000 plant sites per cultivation module
- 14+ specialized module types
- Seamless integration with the Canobi.ONE Suite
- Separate entrances for farm and mechanical room

Physical Specifications

Dimensions	40ft (12.2m) L x 12ft (3.6m) W x 9ft (2.7m) H
Weight	8000 – 20,000 Lbs. (loaded, varies by configuration)
Stacking	Up to 3 modules high
Construction	Galvanized steel frame + Structural Insulated Panels
Durability	Rated -40°C to +50°C
Door Clearance	Fits through standard commercial garage doors
Sealing	Hermetically sealed, washable interior/exterior
Certifications	Transport Canada DOT certified, NSM approved, NHTSA compliant, CSA electric standards compliant

Integrated Canobi Technology Suite:

- **Canobi Genesis.IQ -** Automated germination systems
- **Canobi Monitor.IQ -** Advanced analytics and reporting
- **Canobi Dose.IQ -** Precision nutrient management
- **Canobi Control.IQ -** Intelligent automation and control
- **Canobi Forge –** On-site part manufacturing
- **Canobi R2 -** Robotic cultivation management
- **Canobi.ONE ERP. -** Complete ERP system

Environmental Control:

- **HVAC:** Redundant heating, ventilation, air conditioning
- **Temperature Range:** Precise control ±0.5°C
- **Humidity Control:** 40-95% RH with precision management
- **Air Circulation:** Uniform airflow distribution
- **CO2 Management:** Automated CO_2 supplementation

Lighting Systems:

- **LED Technology:** Full-spectrum, energy-efficient LEDs
- **PPFD:** Up to 500+ µmol/m²/s at canopy level
- **Photoperiod Control:** Automated light scheduling
- **Spectrum Control:** Adjustable red/blue ratios
- **Energy Efficiency:** <2.5 µmol/J efficacy

Water Management:

- **Recirculation:** Closed-loop re-circulation
- **Filtration:** RO system, and mesh filters for a multi-stage water treatment system
- **Pumps:** 6x peristaltic dosing pumps, 2x pressurized main pump

Automation:

100+ sensor compatibility, AI-driven optimization, 24/7 alerts. Data collection every 30 seconds, cloud based storage with local backup. Unlimited historical data retention.

Sensor Array (per module):
- 6x Industrial Temperature/Humidity/Dew Point Probes
- 2x Vapor Pressure Deficit (VPD) Sensors
- 2x CO_2 Monitors
- 4x Water Quality Sensors (pH, EC, ORP, temperature) (DO Sensor Optional)
- 10x Flow Sensors for irrigation monitoring
- Light Sensors for PPFD measurement

100+ Additional Sensor Compatibility As Needed

Production:

- **Plant Density:** 2,000 – 3,000 plants per cultivation module
- **Harvests:** 12 – 16 harvests per year
- **Shelf Life:** 2-3x longer than field grown, premium pesticide free produce
- **30+ Successfully Grown Varieties including:**
  - Leafy Greens (lettuce, spinach, kale, arugula)
  - Herbs (basil, cilantro, parsley, mint)
  - Small Fruiting crops (strawberries, cherry tomatoes, peppers, eggplants)
  - Specialty Crops (edible flowers, medicinal herbs)

Power & Utility Requirements:

Electrical:
- **Primary Power:** 240V, single phase, 50-200 amp service, depending on module type
- **Backup Power:** Optional generator integration
- **Energy Consumption:** 30-45 kWh per day (varies by crop/season)
- **Power Distribution:** Redundant HVAC systems

Water Connection:
- **Supply:** Well or municipal water connection (3/4" minimum)
- **Pressure:** 35-70 PSI operating range
- **Quality:** Basic water supply (system includes filtration)
- **Drainage:** Standard drain connection for waste water

Internet Connectivity
- **Bandwidth:** Minimum 10 Mbps upload/download
- **Backup:** 4G/5G cellular backup option available
- **Security:** VPN and encrypted communications
- **Remote Access:** Complete global accessibility

Delivery & Installation:

Delivery:
- **Complete Module: Factory-assembled, ready-to-deploy**
- **Global Shipping: Certified for international transport**
- **Installation Time: 4-8 hours for utility connections**

Site Requirements:
- **Foundation: Level, compacted surface (concrete preferred)**
- **Utilities: Electrical, water, internet access within 50 feet**
- **Access: Minimum 14-foot clearance for delivery**
- **Drainage: Adequate site drainage required**

Warranty & Support with Active Subscription:

All components inside a Drop-n-Grow are covered with a replacement warranty (HVAC equipment retains the standard manufacturer warranty). Includes evergreen software updates, 24/7 support, and a 99.9% uptime SLA.

Contact

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