Healthy Roots 5000

Team 3

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Oasis Garden Watering System

http://p5.focus.de/img/fotos/origs3754448/3286851666-w467-h458-o-q75-p5/oasisurlaubsbewaesserung.png
Healthy Roots 5000

Description

• Purpose of Product – To automatically dispense water as-needed into the root area of a plant

• Features:
  – Solar-Rechargeable
  – Need-based Watering
  – User-Programmable

• Market: North America, any market or area with 120VAC at 60 Hz as residential voltage
**Key Requirements**

- **Cost**
  - Sales Price: $130, Component Cost: $105, Assembly & Test Costs: $10

- **Environment**
  - Indoor or Outdoor (covered, protected from rain). Ideally located on a windowsill exposed to sunlight or under a covered porch.
  - Operating Temp Range: 0°C-45°C (32°-113°F)
  - Operating Humidity Range: 0%-100% Non-condensing

- **Power Input(s)**
  - Residential AC Power: 114 – 126 VAC @1A max AC
  - Battery Power: Qty:1, 12VDC, 12.5Ahr
  - Other Power Input: Solar Power, 12VDC, 500mA

- **Major Functions, Quantities Measured, Displayed**
  - For each: List the Range, Accuracy, & Resolution
  - **Functions:** On, Off, Monitor only, Run (automatic), Run (manual)
  - **Quantities displayed or measured:** Water float, Battery level, temperature
    - Water float: Range: water/no water, Accuracy: on/off, Resolution: 100%
    - Battery Level: 0 to 12V, Accuracy: +/- 0.1V, Resolution: +/- 5%
    - Temperature: -40°C to 120°C, Accuracy: 10mV/°C, Resolution: Analog/continuous
    - Humidity:0% to 100%, Accuracy: +/- 5%