

Grupp 1



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Product Specification

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1. General Description

A compact environmental monitoring device for mushroom cultivation, integrating sensors for temperature, humidity, and CO2 levels, with user interface components for manual control and alerting, suitable for indoor mushroom farms.

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2. Customer Usefulness

2.1. Maximized Yield and Quality

Mushrooms are highly sensitive to humidity and CO₂ levels at different growth stages. By accurately monitoring and maintaining these parameters, growers can ensure high quality mushrooms.

Proper CO₂ management prevents common problems such as overly long stems or deformed mushrooms, both of which reduce commercial value and customer attractiveness.

2.2. Reduced Crop Loss and Contamination Risk

Maintaining optimal humidity (85-95% during fruiting) and CO₂ (500-1000 ppm during fruiting) reduces the risk of stunted growth, poor pinning, and contamination, leading to more reliable and predictable harvests.

2.3. Increased Operational Efficiency

Real-time monitoring allows growers to react quickly to environmental changes, reducing the need for guess-work and minimising lost harvests.

Automated alerts (via buzzer) and easy-to-use controls mean even less experienced staff can maintain ideal conditions, lowering the barrier to entry for new growers.

2.4. Energy and Resource Savings

By only ventilating or humidifying when necessary - based on actual sensor readings - growers can save on electricity and water, making operations more sustainable and cost-effective.