



Environmental Control System

Features

- ✓ MEKASERA CENTER
- ✓ MEKASERA RTU
- ✓ VLHC - DEHUMIDIFICATION / HEATING
AIR FILTERING
- ✓ NEBULA – MOISTENING / IRRIGATION
- ✓ VENTILATION
- ✓ DISINFESTATION - SMOKE / LIQUID
- ✓ HEAT BOILER / MULTIPOINT VALVE
- ✓ THERMAL SCREEN
- ✓ AIR CIRCULATION FAN
- ✓ ELECTRIC CONSUMPTION / FUEL CONSUMPTION
- ✓ CAMERA

ENERGY
EFFICIENCY

COST
COMPETITIVE

LOW OPEX

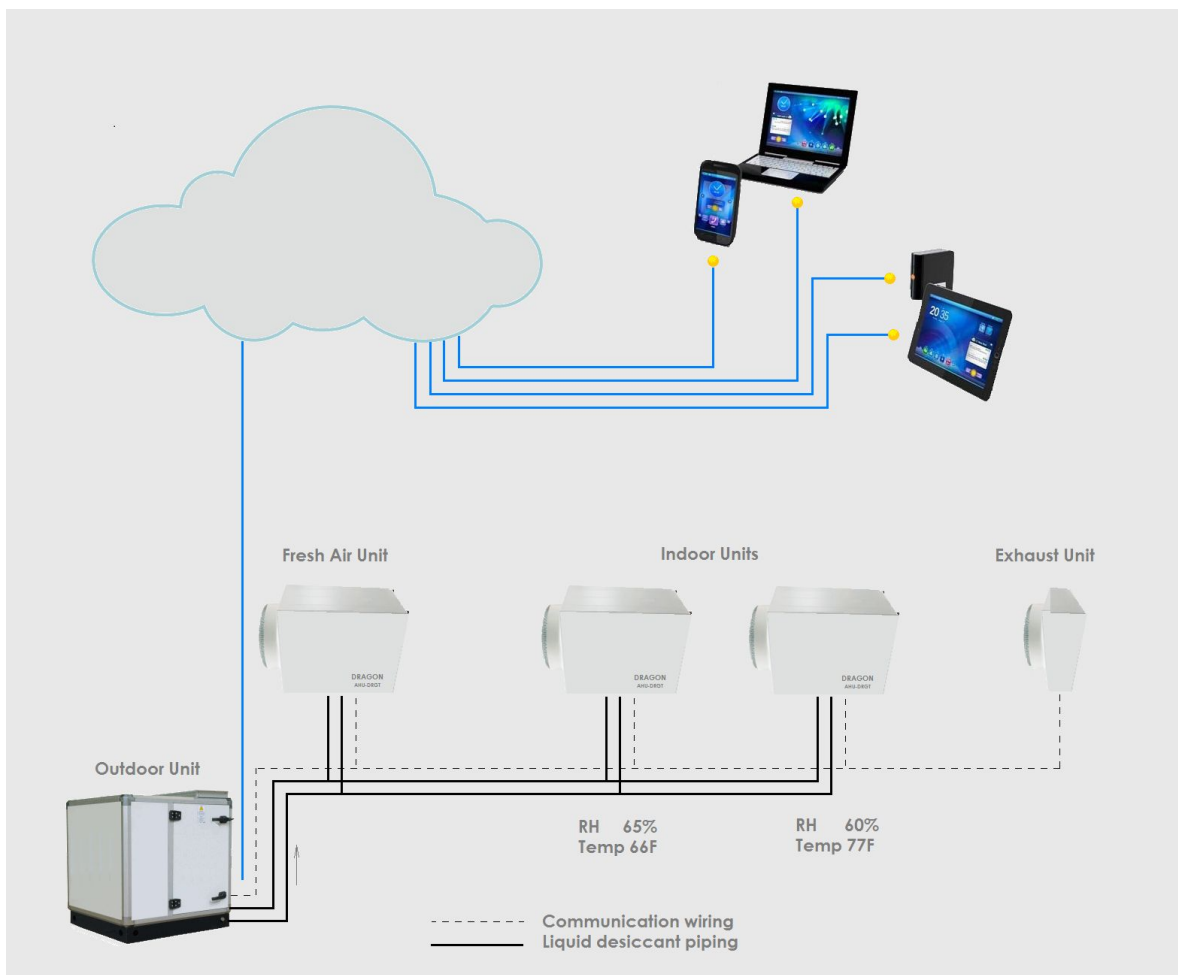
APPLICATION
CONTROL

WEB BASED

MONITORING

Now you can manage greenhouse humidity, temperature, moisture, air-circulation, electricity and fuel consumption with a single, integrated system accessible from any smartphone or computer. This amazing technology will make you save money and time while monitoring, managing and securing your greenhouse.

Our specially designed, patented, web-based system for monitoring, managing and securing your grow houses will greatly improve the quality and volume of your product, while vastly reducing energy and maintenance costs.



Configuration

The system includes the following modules:

1. MEKASERA CENTER

Mekasera Center is the brain of our integrated system. In constant communication with the RTU — the managing module inside the greenhouse — the center synchronizes all information in its database and can be accessed and controlled anywhere in the world with a computer or a smartphone, allowing the user to access reports, check alerts and most importantly, manage all instruments. *The alerts can be designed according to your needs and sent to you by mail or SMS.*

2. MEKASERA RTU

The managing module inside the greenhouse, the RTU monitors information from all other control modules inside the greenhouse, relays this information to Center, and makes adjustments when prompted by Center. *Connection to Center can be wireless or wired.*

3. DE-HUMIDIFICATION, HEATING, AIR FILTERING

This patented system sucks up the humid, cold, dirty air and produces dry, warm, clean air, reducing fuel consumption by 60%. The system also eliminates bacteria such as Botrytis Cinerea and Ervinia, reducing the need for chemicals, saving an average of 600-700 Euro per 1,000 square meters. While the system reduces energy and maintenance costs, it greatly increases the quality and volume of the product.

4. NEBULA HUMIDIFICATION AND IRRIGATION

Our sensor system controls air quality, humidity and air temperature inside the greenhouse. It can be controlled via timer or by water level.

5. VENTILATION

The ideal air control by controlling motorized windows

6. SOIL MONITORING

- Instantly measure soil moisture, electrical conductivity/salinity, temperature, and more
- Optimize soil analysis and irrigation
- Enables measurement of native (undisturbed) soil
- Measure flow and movement of the wetting front through a soil profile

7. DISINFESTATION - SMOKE / LIQUID

Automatic disinfestations with smoke and/or liquid forms

8. HEAT BOILER / MULTIPOINT VALVE

The management of boiler, burner and valves

9. THERMAL SCREEN

The automatic closing and opening of thermal screens

10. AIR CIRCULATION FAN

The air circulation is done by installed fans in the greenhouse

11. ELECTRIC CONSUMPTION / FUEL CONSUMPTION

The measurement of electricity and fuel consumption at the site

12. CAMERA

Visual security and control of sites are done by day/night vision cameras

Search for Zone...

Enerama Greenhouse #1

Dashboard

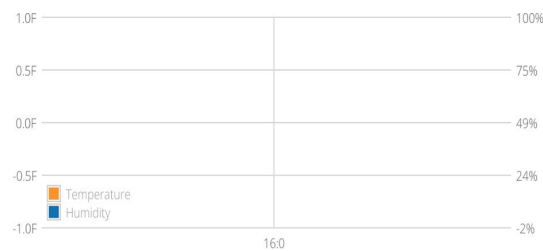
Sync. 8 months ago

Imperial | Metric

Tuzla, Istanbul Turkey

Weather Station

| | | | |
|-------------|---|----------------|------------|
| Temperature | 62.6 °F | Humidity | 56 % |
| Wind Speed | 9 mi/h | Wind Direction | West |
| PAR | 600 $\mu\text{mol}/\text{m}^2/\text{s}$ | Rain Rate | 0.039 in/h |



Events History

Zone 1

Humidity level is under the limit.
One week ago

Alarm

Weather Station

Outside temperature is lower than critical limit.
2 weeks ago

Alarm

[View All Events](#)

Zone Information

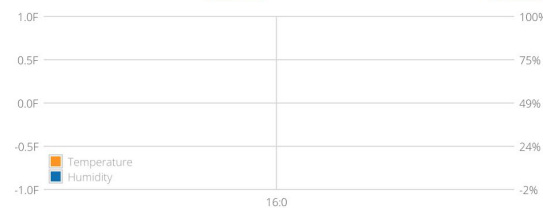
Select Zone

Zone 1

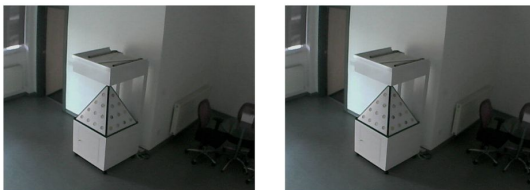
| | | | |
|-------------|---|----------|------|
| Temperature | 75.2 °F | Humidity | 1 % |
| CO2 | 600 ppm | Oxygen | 17 % |
| PAR | 400 $\mu\text{mol}/\text{m}^2/\text{s}$ | PH | 6.0 |
| EC | 1.2 uS/cm | PPM | 840 |

Zone Equipment

| | | | |
|-----------------|-----|-----------------|-------|
| Electric Heater | OFF | Air Circulation | OFF |
| Curtain | OFF | Lights | OFF |
| Mist | OFF | CO2 Valve | OFF |
| F. Ventilation | OFF | Evap. Cool | OFF |
| Ventilation | 0% | Irrigation | 0.12% |



Cameras



Central Equipment

Dehumidifier [Dragon]

| | | | |
|----------------|--------|------|------|
| Status | Normal | Mode | Stop |
| Operating Time | 0:0:0 | | |

Fertilizer Unit [FR1]

| | | | |
|-------------|-----------|-----|-----|
| Status | Normal | PH | 6.0 |
| EC | 1.2 ms/cm | PPM | 820 |
| Temperature | 18 C | | |

Irrigation Unit [IR1]

| | | | |
|-------------|--------|----------|----------|
| Status | Normal | Pressure | 3.1 bars |
| Active Pump | P1 | | |



More information

Please contact info@enerama.com for further assistance on the Dragon Dehumidification System.

Enerama Environmental Technologies Inc.

UNITED STATES

201 Ocean Ave. suite 1409P
Santa Monica, CA. 90402

CANADA

1515 Bywood Place,
Victoria, BC. V8S 1X7

TURKEY

IAYOSB, 10. Sokak 1
34953 Tuzla, 34953 Istanbul