

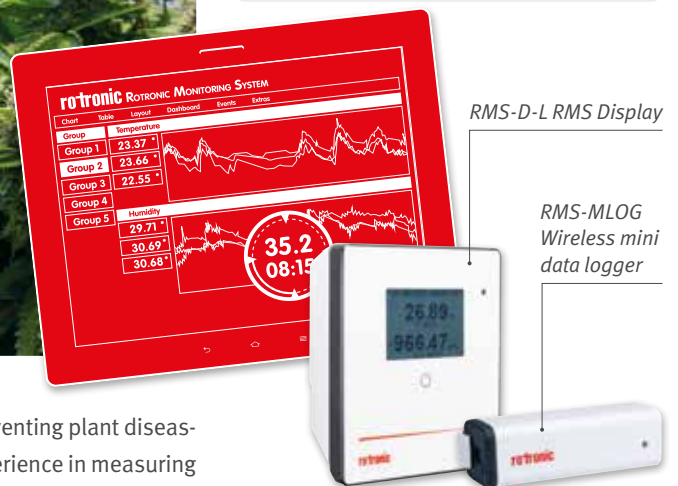
REAL-TIME MONITORING FOR THE CANNABIS INDUSTRY

With Rotronic's Category 4 Monitoring Soft- and Hardware – RMS



Applications

- Growing
- Drying
- Warehouse storage
- Trimming
- Extraction and encapsulation
- Indoor air quality
- Fridges and Freezers
- Laboratory monitoring
- Vault and door interlock



Greenhouse humidity and temperature levels are important both in preventing plant diseases and promoting healthy and strong plant growth. Trust Rotronics experience in measuring all important parameters.

FEATURES

- Automatic report generation
- Monitor multiple locations, in one system from anywhere
- Scalable – perfect for small to large installations
- Designed for Rotronic devices and 3rd party sensors
- Receive alerts via interactive phone, texts and emails
- Hosted at the customer site or by Rotronic
- Create custom dashboards and layouts per user
- Define different user roles and ability
- FDA 21 CFR Part 11 and GxP compliant

BENEFITS

- Compliance, audit and risk management
- Time savings with automatic report generation
- 24/7 real-time centralized management of all operations
- Compare and analyze historical harvest data
- Adjust environmental measurement types for future crops
- All critical parameters in one system

MEASUREMENT TYPES

- Humidity and temperature
- CO₂
- Differential pressure
- Particle counting
- Light (lumens, PAR, lux, etc.)
- pH
- Soil moisture
- Water quality
- Webcams (pictures)

Get your free Demo-Account:

www.rotronic.com/rms - rms@rotronic.ch

SOFTWARE FEATURES

Data Views

RMS offers five different views to present the current system data:

- Chart – Measured values graphically & numerically
- Table – Measured values numerically
- Layout – Measured values numerically with placement in a room layout
- Dashboard – Individual dashboard for every user
- Events – Audit log, alarms, warnings, system messages

Alarms

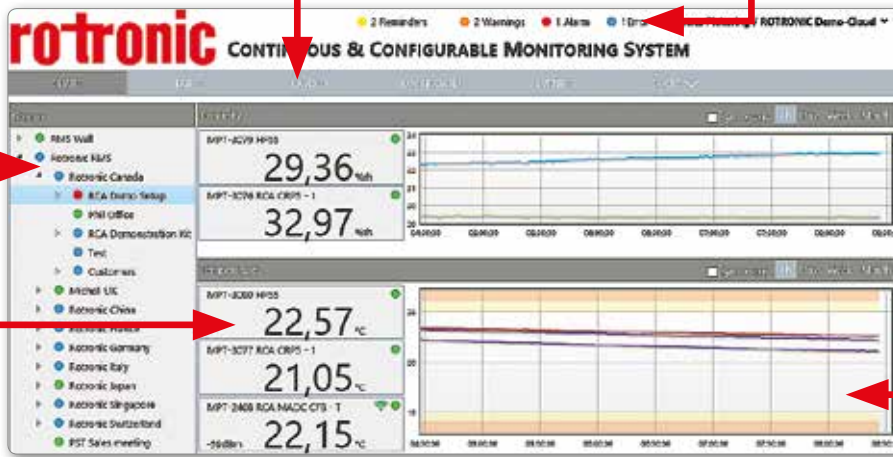
- Events that are not urgent
- Measured values above warning limit
- Measured values above alarm limit
- Urgent hardware errors

Groups

Group information by location, room, etc.

Measurement Values

Real-time measurement value



Alarm Bands

Provide a visual depiction of warnings and alarms.

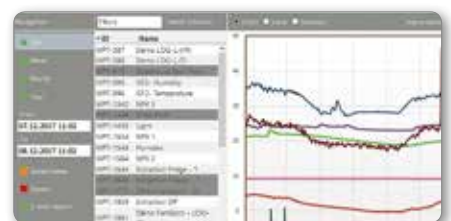
Layout view



Audit / Event Log

ID	Date	Event	Message
001	2018-01-01 00:00:00	Measurement out of limit	Temp 21.00°C too low
002	2018-01-01 00:00:00	Measurement out of limit	Humidity 90% too high
003	2018-01-01 00:00:00	Measurement out of limit	Temp 25.00°C too high
004	2018-01-01 00:00:00	Measurement out of limit	Humidity 80% too low
005	2018-01-01 00:00:00	Measurement out of limit	Temp 15.00°C too low
006	2018-01-01 00:00:00	Measurement out of limit	Humidity 95% too high
007	2018-01-01 00:00:00	Measurement out of limit	Temp 30.00°C too high
008	2018-01-01 00:00:00	Measurement out of limit	Humidity 70% too low
009	2018-01-01 00:00:00	Measurement out of limit	Temp 35.00°C too high
010	2018-01-01 00:00:00	Measurement out of limit	Humidity 60% too low

Data Analysis



WATER ACTIVITY

Water Activity devices from Rotronic are the perfect solution for on-site water activity measurements to confirm product stability and indicate shelf life. Water activity is a measure of the available water that can be utilized for microbiological growth.

Most Cannabis is dried and cured to a final water activity level of Aw 0.30 – 0.60. Humidity and Wateractivity also influences the quality of seeds.

Features

- Very accurate Aw measurement ±0.008 Aw
- Fast measurement time, typically under 5 minutes
- Interchangeable measurement probes
- Multiple probes can be used at the same time
- Can be used for dried product or extract oil
- Adheres to FDA 21 CFR part 11/GAMP5

