

Real-Time Monitoring Solutions for Pharmaceutical Manufacturing

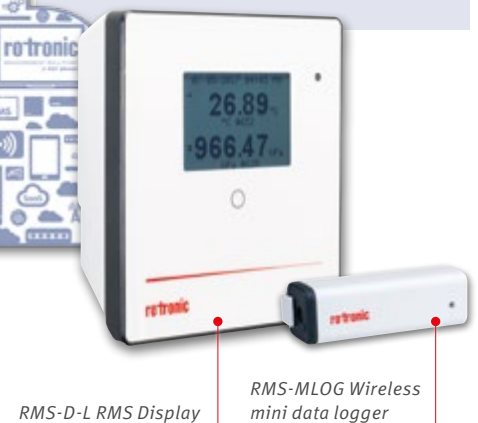
With PST's Category 4 Monitoring Software and Category 1 Hardware Solutions.



Monitoring applications within pharmaceutical manufacturing

- Storage areas for starting materials, semi finished and finished products
- Synthesis and formulation manufacturing areas (blending & coating)
- Aseptic and sterile manufacturing areas
- Packaging areas
- Laboratory and quality testing areas

In the pharmaceutical industry, drug manufacturing involves several stages, each of which requires precise environmental control to ensure the quality and efficacy of the final product. Trust in PST's real time monitoring experience and our wealth of knowledge of all critical environmental parameters to comply with the GLP/GSP/GMP/GDP regulations and ICH/FDA guidelines.



RMS-D-L RMS Display

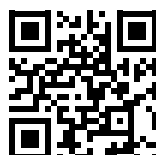
RMS-MLOG Wireless mini data logger

Features

- Automatic report generation
- Monitor multiple locations, in one system from anywhere
- Scalable – perfect for small to large installations
- Receive alerts via interactive phone calls, texts and E-Mails
- Hosted at the customer site or within an ISO27001 data centre
- Create custom dashboards and layouts per user
- Define different user roles
- FDA 21 CFR Part 11/EU Annex 11 compliance...

Benefits

- Compliance, audit and risk management
- Time savings with automatic report generation
- 24/7 real-time centralized management of all monitoring operations
- Compare and analyze historical data
- All critical control parameters in one system



Contact us to discuss your application

Measurement types

- Temperature
- Relative humidity
- Carbon dioxide CO₂
- Oxygen O₂
- Differential pressure
- Particle counting
- Light (lumens, PAR, lux, etc.)
- Door monitoring (open/closed)



Learn more

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

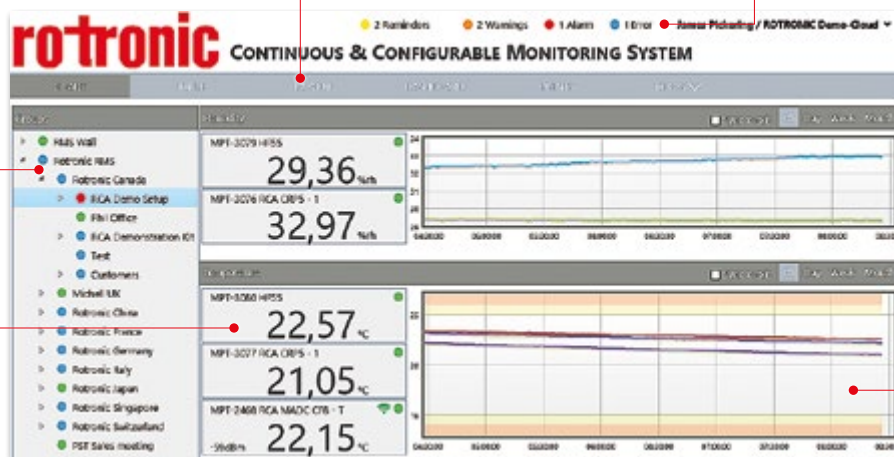
- Events that are not urgent
- Measured values above warning limit
- Measured values above alarm limit
- Urgent hardware errors

Groups

Group information by location, room, etc.

Measurement values

Real-time measurement value



Alarm bands

Provide a visual depiction of warnings and alarms.

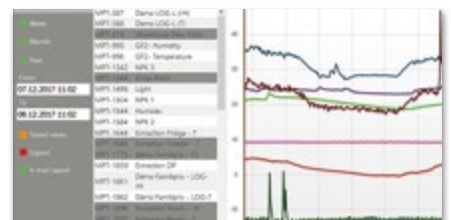
Layout view



Audit / Event log

ID	Time	Event	Target	Details
1000000001	2019-02-08 12:00:00	Measured value out of band	MPF-3079 HBS	Measured value out of band
1000000002	2019-02-08 12:00:00	Measured value out of band	MPF-3076 RICA CR/S - 1	Measured value out of band
1000000003	2019-02-08 12:00:00	Device connected	MPF-3076 RICA CR/S - 1	Device connected
1000000004	2019-02-08 12:00:00	Device connected	MPF-3076 RICA CR/S - 1	Device connected
1000000005	2019-02-08 12:00:00	Device connected	MPF-3076 RICA CR/S - 1	Device connected
1000000006	2019-02-08 12:00:00	Device connected	MPF-3076 RICA CR/S - 1	Device connected
1000000007	2019-02-08 12:00:00	Device connected	MPF-3076 RICA CR/S - 1	Device connected
1000000008	2019-02-08 12:00:00	Device connected	MPF-3076 RICA CR/S - 1	Device connected
1000000009	2019-02-08 12:00:00	Device connected	MPF-3076 RICA CR/S - 1	Device connected
1000000010	2019-02-08 12:00:00	Device connected	MPF-3076 RICA CR/S - 1	Device connected

Data analysis



Additional Services

1. Calibration

We offer a range of ISO-17025 and traceable calibration services, both within our facilities and onsite. Find out more about our local services here:



2. Qualification

PST offer qualification services for rooms and equipment to help ensure the perfect environment throughout all facilities. The qualification will ensure the placement of the sensors within the various environments to ensure the highest quality of measurement data.

3. Validation

Validation includes the provision of documented evidence that a system was planned/produced according to quality guidelines, is tested against specifications and has been operated in a qualified manner since it was introduced. The PST real-time monitoring solutions are

validateable and PST offer complete documentation, including IQ/OQ and PQ to fully validate the systems.

4. Consulting

PST offer a range of consulting services from the start of a project, including the URS, through the complete validation master plan, includ-

ing the development of SOP's and risk analysis.

5. Maintenance and support

Ensure the long-term stability and accuracy of your system with a regular maintenance and inspection of all systems.