

## Live Monitoring at Keppel Logistics Warehouses

*Keppel Logistics operates world-class logistics facilities with state-of-the-art IT infrastructure, and relies on the new Rotronic Monitoring System in their warehouses.*

In Keppel's storage spaces, temperature monitoring is key. Keppel's customers in the pharmaceuticals sector utilize both air conditioned and non air conditioned storage.

One of Keppel Logistics' main requirements is to be able to carry out real-time monitoring, allowing both the management and their customers to have direct access to the warehouse conditions from anywhere in the world and at any time.

Furthermore, Keppel required a simple way to collect data, while at the same time maintaining the integrity of the data. Based upon Keppel's and their customers' requirements, the Rotronic Monitoring System was implemented, allowing real-time monitoring and data recording, and meeting the requirements of FDA 21 CFR Part 11.

**«We were** convinced by the flexibility that RMS offers with regard to further expansion of the system, and by the ease of use.»

Vync Toh, Keppel Logistics, Singapore

Rotronic was able to offer Keppel two solutions: either a cloud-based system hosted from either Singapore or Switzerland, or a server-based system installed directly at Keppel Logistics.

The system setup (choice of software, hardware and services) was made by the team leader. All temperature points are automatically uploaded to the system. Management just have to login to access the data, or can receive their own personalized reports remotely on a regular basis. With no more manual data collection, this



*RMS Mini Logger installed in the warehouse.*

saves a tremendous amount of time - the data are accessed via smartphone, tablet, or PC, from any location worldwide.

Presently, Keppel measures only the temperature. However, thanks to the flexibility of RMS, Keppel has the capability to monitor further parameters, such as relative humidity, dew point and differential pressure, also door contacts, and much more. Even third-party products can be integrated without any issues.

### Keppel Logistics

Keppel Logistics is a wholly owned company of the Keppel Telecommunications & Transportation Group in Singapore. Its core business areas are logistics and data center operations in the Asia, Pacific and Europe area.