

Make Your ICeraQ Solution Even Cooler


Stay in Control with GRC Systems Manager





With its proven performance and operational simplicity, immersion cooling can fast-track you toward accomplishing your data center's mission. Constant monitoring of your infrastructure is also critical.


That's why we developed GRC Systems Manager, which is a powerful appliance providing centralized access to all connected ICeraQ® and ICETank® systems through a single interface, utilizing your secure network. Although not necessary for efficient operation and maximum reliability, the Systems Manager offers peace of mind via its reporting and alert capabilities.

Key Features:

 **Early Fault Detection:** Rely on reporting and alerting capabilities to quickly detect potential issues related to filter life, pump performance, heat exchanger efficiency, and more. Proactively schedule repairs and avoid unplanned downtime.

 **Smart Alerts:** Receive text or email alerts based on a variety of configurable trigger events, keeping you informed wherever you are.

 **Robust Reporting:** Systems Manager continuously logs rich performance data to ensure easy troubleshooting and metadata analysis. Logged data is available for viewing via dashboard or as a downloadable data file (see reverse).

 **GRC System Alert Management Service:** Resolve issues faster by providing GRC VPN access to your system's logs, log archives, and PLC settings.

Product Components

IASYSMNG

GRC Systems Manager Software and Server

5-Port Unmanaged Switch

Network Cables

IA4PRT

4-Port Cellular Router (optional)

Microservices

RESTful API

Alert Watchdog

Data Sender

Data Scraper

Measurements Logged/Reported

Operating Temperatures (water and coolant)

Operating Pressures (water and coolant)

Primary Coolant Pump Power Consumption

Primary Coolant Pump Speed

Rack Temperatures

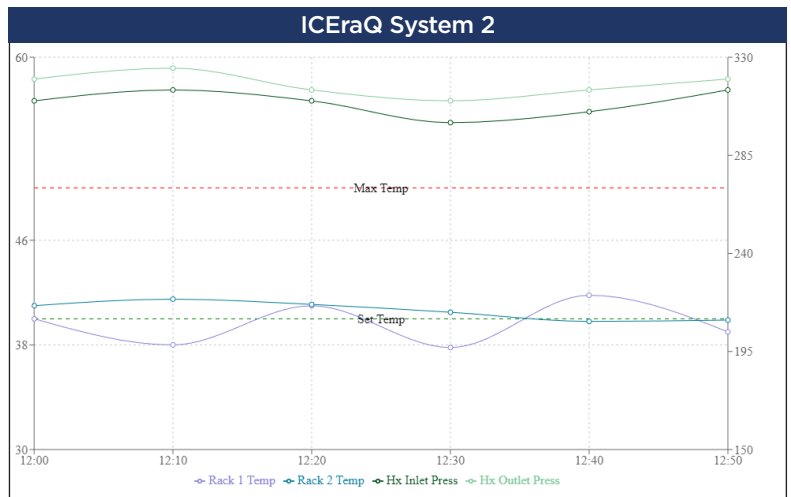
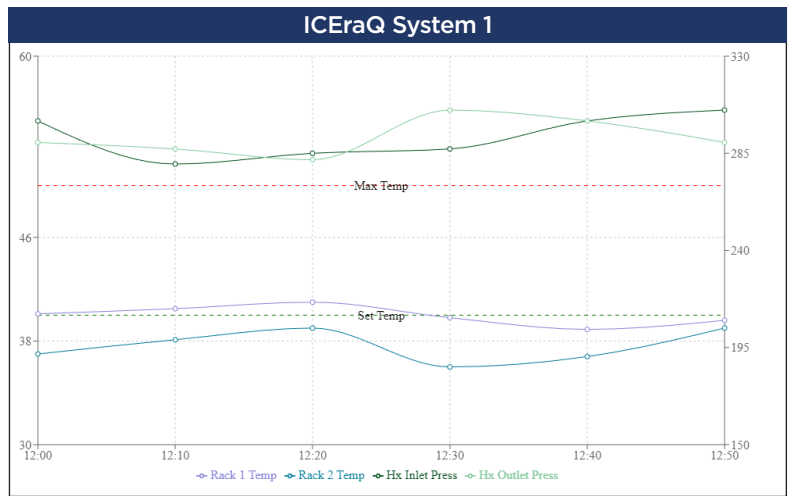
Liquid Level (multiple locations)

System Health, Diagnostics & Early Fault Detection

Maximize uptime by putting another star performer on your data center team. Free up your time and gain real peace of mind.

With GRC Systems Manager you'll always be in the know, from anywhere, because it provides 24/7 visibility into system performance. What's more, you'll be confident your servers are up and running, and that you're realizing the enhanced reliability and service life immersion cooling has to offer.

Comprehensive Monitoring
View the status and performance of all networked ICEraQ systems.



| Time | pp Drive Block Freq | pp Read Drive Output Power | pp Read Drive Input Power | Rack 1 Top | Rack 2 Top | H2O Temp In | H2O Temp Out | Coolant Temp In | Pump P | H2O Press Hot | H2O P Cold | Manifold P |
|-------------|---------------------|----------------------------|---------------------------|------------|------------|-------------|--------------|-----------------|--------|---------------|------------|------------|
| 10:05:00 AM | 24.0 | 39.0 | 63.0 | 25.2 | 24.9 | 24.7 | 25.0 | 24.9 | 29.1 | 54.3 | 46.8 | 8.8 |
| 10:05:00 AM | 24.0 | 40.0 | 63.0 | 25.2 | 24.9 | 24.7 | 25.0 | 24.9 | 29.1 | 53.0 | 45.4 | 8.8 |
| 10:06:00 AM | 24.0 | 39.0 | 63.0 | 25.2 | 24.9 | 24.7 | 25.0 | 24.9 | 29.1 | 54.0 | 46.2 | 8.8 |
| 10:06:00 AM | 24.0 | 39.0 | 63.0 | 25.2 | 24.9 | 24.7 | 25.0 | 24.9 | 29.1 | 53.9 | 46.2 | 8.8 |
| 10:07:00 AM | 42.5 | 201.0 | 225.0 | 25.2 | 24.9 | 24.7 | 25.1 | 24.9 | 84.5 | 54.3 | 46.9 | 17.7 |
| 10:07:00 AM | 43.5 | 215.0 | 236.0 | 25.2 | 24.9 | 24.6 | 25.1 | 24.9 | 88.8 | 53.7 | 46.1 | 18.5 |
| 10:08:00 AM | 45.0 | 232.0 | 261.0 | 25.2 | 25.0 | 24.2 | 25.1 | 24.9 | 93.9 | 52.7 | 45.2 | 19.0 |
| 10:08:00 AM | 45.0 | 234.0 | 258.0 | 25.2 | 25.0 | 23.1 | 25.1 | 24.9 | 93.3 | 54.0 | 46.6 | 19.5 |
| 10:09:00 AM | 45.0 | 235.0 | 259.0 | 25.2 | 25.0 | 22.4 | 25.1 | 24.9 | 93.6 | 53.7 | 46.5 | 19.2 |
| 10:09:00 AM | 45.0 | 231.0 | 257.0 | 25.2 | 25.0 | 21.7 | 25.1 | 24.8 | 93.6 | 55.1 | 47.8 | 19.0 |
| 10:10:00 AM | 45.0 | 234.0 | 257.0 | 25.2 | 25.0 | 20.8 | 25.1 | 24.8 | 94.7 | 52.7 | 45.8 | 18.9 |
| 10:10:00 AM | 45.0 | 232.0 | 257.0 | 25.2 | 25.0 | 20.0 | 25.2 | 24.7 | 94.3 | 53.0 | 45.5 | 19.3 |
| 10:11:00 AM | 45.0 | 238.0 | 258.0 | 25.2 | 25.0 | 19.6 | 25.2 | 24.7 | 94.0 | 53.4 | 45.8 | 18.9 |
| 10:11:00 AM | 45.0 | 236.0 | 259.0 | 25.2 | 25.0 | 19.3 | 25.2 | 24.7 | 93.4 | 53.1 | 46.1 | 18.9 |
| 10:12:00 AM | 45.0 | 235.0 | 260.0 | 25.2 | 25.0 | 19.2 | 25.2 | 24.9 | 94.2 | 52.5 | 45.1 | 19.0 |
| 10:12:00 AM | 45.0 | 233.0 | 258.0 | 25.2 | 25.0 | 20.2 | 25.2 | 24.9 | 94.0 | 54.0 | 46.6 | 18.9 |
| 10:13:00 AM | 45.0 | 234.0 | 257.0 | 25.2 | 25.0 | 21.9 | 25.2 | 25.0 | 94.3 | 53.8 | 46.5 | 19.0 |
| 10:13:00 AM | 45.0 | 234.0 | 258.0 | 25.2 | 25.0 | 22.8 | 25.2 | 25.0 | 93.8 | 54.5 | 46.8 | 18.9 |
| 10:14:00 AM | 45.0 | 234.0 | 257.0 | 25.5 | 25.0 | 23.3 | 25.2 | 25.0 | 94.4 | 54.3 | 47.0 | 19.1 |
| 10:14:00 AM | 45.0 | 234.0 | 259.0 | 26.1 | 25.0 | 23.7 | 25.2 | 25.2 | 93.6 | 54.6 | 47.3 | 18.7 |
| 10:15:00 AM | 45.0 | 234.0 | 259.0 | 26.6 | 25.1 | 23.9 | 25.2 | 25.5 | 93.2 | 52.9 | 45.5 | 19.2 |

Downloadable Logs
Easily export system data in standard formats to perform custom analytics.

Put GRC's ICEraQ Solutions and Systems Manager to Work for You

Call **+1.512.692.8003** • Email **ContactUs@grcooling.com** • Visit **grcooling.com**