

MAXIMIZE UPTIME IN DATA CENTERS



- Simplified Maintenance
- Rapid Recovery
- Enhanced Security

MELSEC iQ-R Series

Ensuring continuous operation is the top priority in data center operations. Component failures, power issues, and user errors can all lead to downtime.

One way to maximize uptime is by installing a robust duplicate backup system. This redundant system duplicates monitoring and control of critical cooling equipment such as chillers, fans, and UPS systems.

The core component in the redundant system is the MELSEC iQ-R Series Controller. This programmable controller ensures high reliability for consistent uptime.

A full line of products allow for the duplication of network communication, signal inputs and outputs, safety components, and more.

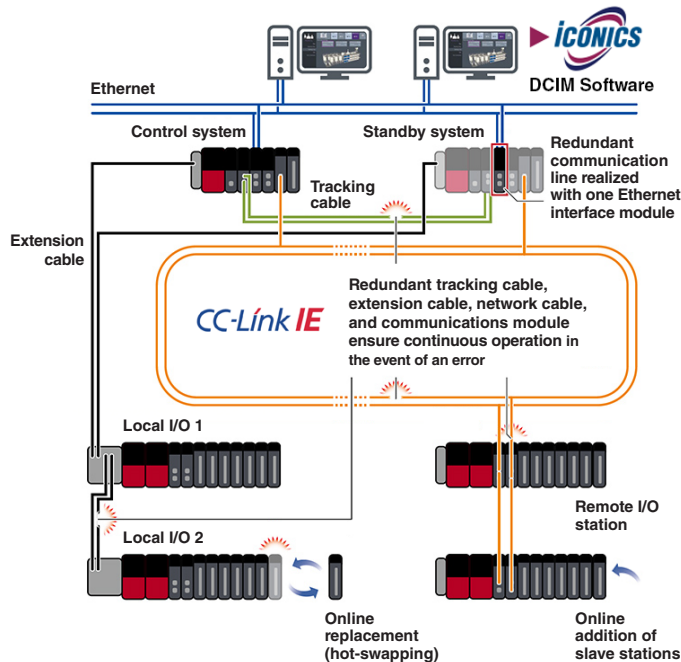
KEY BENEFITS

- **Seamless integration** – Open network support for BACnet® and MODBUS® enable integrated management of cooling equipment.
- **No single point of failure** – The control system connects to the ICONICS DCIM Solution, through most open industrial networks. This software supports duplication of data logging and alarm monitoring.
- **Rapid recovery** – An optical fiber tracking cable positioned between the control system and the backup system enable 10ms switching time.
- **Simplified maintenance** – Parameters and programs are automatically transferred to the standby system, minimizing complexity and cost.
- **Enhanced security** – Four types of security (hardware key, software key, password, and IP address) provide protection against cyber attacks.

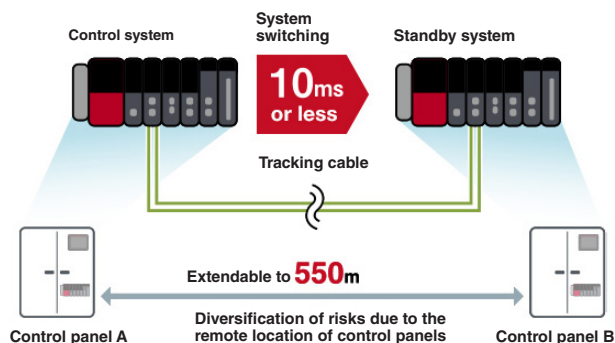
How Rapid Recovery Works

By connecting an optical fiber tracking cable between systems, the control system and the backup system can be separated by up to 550m. This reduces risk, eliminates noise, and enables high-speed data communication for rapid switching time and continuous control.

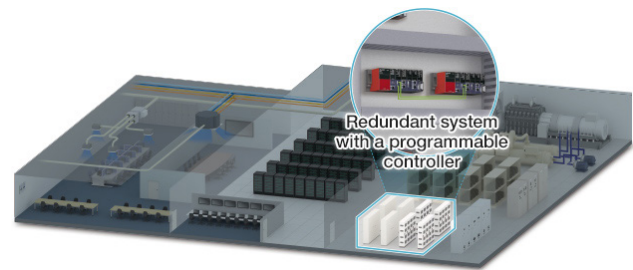
Adding a Redundant System for High Reliability



Rapid Recovery Enables Continuous Control



Data Center Power and Cooling Infrastructure



More information

Check out our website:

https://www.mitsubishielectric.com/fa/sols/industry/datacenter/equipment/air_conditioning.html#sec_3

Specifications

iQ-R Standard Specifications

iQ-R Series PLC CPUs	40KB to 4.8MB Program Capacity 252 KB to 3.38 MB Device Memory Built In Ethernet Port, Modbus TCP, SLMP, CC Link IE Field Basic
BACnet Module	100BASE-TX/10BASE-T: 1 port ANSI/ASHRAE135-2001 ANSI/ASHRAE135-2004 ANSI/ASHRAE135-2010
EtherNet Module	1000BASE-T/100BASE-TX/ 10BASE-T: 2 ports MODBUS/TCP master/slave station Network type: Ethernet
Power Supplies	24 VDC, 100-200VAC

iQ-R Redundant Specifications

iQ-R Series Process CPUs	320KB to 4.8MB Program Capacity 1.188MB to 3.38MB Device Memory
Redundant Function Module	Multimode Optical Fiber

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