

# Remote Refrigeration Control

# **Frequently Asked Questions**

## Q1. What is the Heatcraft Remote Refrigeration Control?

A1. The Heatcraft Remote Refrigeration Control (RRC) is an internet-based control system that allows end-users to manage their refrigeration systems using any web browser, from anywhere in the world.

#### 02. Where can I use RRC?

- A2. RRC is available for:
  - a. Mohave Advanced Hot Gas Defrost systems
  - b. Beacon II Refrigeration systems
  - c. Quick Response Controller (QRC) evaporators

#### Q3. What are the features of RRC?

- A3. Control room/facility temperature remotely
  - Real-time 24/7 remote monitoring & control via internet
  - . Email & text alarm notifications
  - Alarm codes quickly identify system issues
  - Manage multiple locations with one account
  - · Collect & store system data

## Q4. What are the benefits of RRC?

- A4. Log in from anywhere
  - Detect issues before they become a problem
  - · Reduce service calls with system alerts
  - Longer product life
  - Improved product integrity
  - Lower operational costs

## Q5. How can the RRC help me increase efficiencies and decrease costs?

- A5. Alerts allow a contractor or user to receive advance notifications of issues before they become potential emergencies.
  - Troubleshooting a system issue remotely enables a contractor to have knowledge of the severity of the issue prior to traveling to the site. The contractor could arrive with the appropriate parts and equipment eliminating extra trips to the site.
  - In some cases, an issue with the refrigeration system can be diagnosed and corrected remotely without ever needing
    to visit the site.
  - Quick diagnostics and resolution of the issues increase the likelihood that the stored product is not negatively impacted.
  - By monitoring the performance of the system, set points can be optimized to ensure the system is operating at peak efficiency.

#### Q6. How do I order RRC?

- The RRC is available through Heatcraft by contacting your Heatcraft Application Engineer or Customer Care Representative.
- Mohave RRC requires 3 part numbers: a modem kit, gateway kit & monitoring service.
  - Only the factory installed version is included with ProSelect
  - For field retrofit, be sure to choose the correct modem kit
  - The gateway kit and monitoring service part numbers are the same for both factory installed & field retrofit
- Beacon II RRC requires 2 part numbers: a gateway & monitoring service.
- QRC RRC requires 2 part numbers: a gateway & monitoring service.

## Q7. What are the part numbers and pricing to order RRC?

A7.

A6.

RRC for Mohave				
Description	Part Number	Price		
Modem kit (factory installed)	59661501	\$2196 List (1 per condensing unit)		
Modem kit (field retrofit)	59661701	\$2196 List (1 per condensing unit)		
Gateway kit	59661801	\$4391 List (1 per site)		
Annual monitoring service	rrc_monitoring_svc	\$1 (first year) List \$365 NET (per condensing unit)		

RRC for Beacon II and QRC			
Description	Part Number	Price	
Gateway kit (field retrofit)	28999401	\$2745 List (1 per smart controller)	
Annual Monitoring service	rrc_monitoring_svc	\$1 (first year) List \$365 NET (per Gateway)	

#### Q8. How do I install and configure RRC?

- A8. Complete installation instructions can be found here: www.heatcraftrpd.com/rrc
  - Once you have completed the physical installation and the wiring, make sure the Gateway is visible on your network.
  - Contact the Heatcraft Field Service Department at 800-321-1881 for assistance.

## Q9. Can I use RRC on existing systems?

A9. Yes, you can buy field kits to install on all existing Mohave systems, Beacon II Systems, or QRC evaporators. Mohave board firmware may need to be updated.

## Q10. Do I need a Mohave board firmware update to enable RRC?

- A10. Mohave units shipped in March 2016 or after will have the latest firmware version 2.05.
  - Mohave units shipped in February 2016 or before may need a firmware update

## Q11. How do I verify my Mohave board firmware version?

A11. On the Mohave board, press and release the MONITOR button until "VERS" is displayed. The software version will display in a few seconds.

## Q12. How do I update Mohave board firmware?

- A12. Option 1: You can purchase new Mohave control boards with the latest firmware installed.
  - Option 2: A Heatcraft field engineer can re-flash existing Mohave control boards with the new firmware. Charges below are minimal compared with industry standards and are structured for Heatcraft to recoup actual expenses only. Contact the Heatcraft Field Service Department at 800-321-1881.
    - \$700 per day plus expenses (part number "STARTUP")
      - 2 day minimum Eastern & Central time zones
      - 3 day minimum Mountain & Pacific time zones
      - 4 day minimum Alaska & Hawaii

## Q13. Can I order Mohave RRC factory installed on new units?

A13. Yes, the RRC option can be chosen from ProSelect.

## Q14. How do I use my Mohave condensing unit to monitor or control box temp?

- A14. Connect an auxiliary temperature sensor from the refrigerated space to the AUX TEMP molex connector on the Mohave board.
  - The AUXT parameter under PROGRAM REVIEW determines how the signal is used
    - Choose AUXT = OFF to monitor room temp.
    - Choose AUXT = ON to use the Mohave board to control room temp. This enables the BOXT parameter, which is the box temperature set point.
    - More detailed instructions can be found in the Mohave I&O Manual.

## Q15. How does annual monitoring work?

- A15. Annual monitoring is a service that grants access to your system data and settings, which is maintained through the Heatcraft RRC website.
  - The website address is: http://rrc.heatcraftrpd.com

## Q16. Does Heatcraft manage the data services and user accounts?

A16. Yes. Heatcraft, along with a third party, manages the servers and account information.

### Q17. Can I see a demo of the RRC website?

- A17. Yes! We have set-up a Sales Demo user name & password for you to use in demonstrations with your customers:
  - User name: Sales
  - Password: Heatcraft
  - Once you log-on to the website, the site displayed is an actual customer installation in Wisconsin, which has been used with their permission.

#### Q18. How do I get help with RRC setup?

A18. Contact the Heatcraft Field Service Department at 800-321-1881 for assistance.

## Q19. What is a Gateway?

- A19. A Gateway is used to communicate information between refrigeration equipment and the internet. The Gateway connects to the customer's local area network (LAN) using a standard network cable, typically a CAT5 cable.
  - A Gateway is used for all of the Heatcraft RRC solutions.

#### **Q20.** What is a Modem?

- Q20. The modem is wired into the RS-485 connections on the Mohave board, and wirelessly communicates refrigeration data to and from the Gateway.
  - Heatcraft only uses a modem for the Mohave RRC solution. Beacon II and QRC do not require a modem.

## Q 21: How do I order service parts for RRC devices?

A 21: RRC service parts are available by contacting your local Heatcraft Wholesaler or Interlink Parts at 800-686-7278. The following service parts are available:

## **Service Parts - RRC for Mohave**

DESCRIPTION	PART NUMBER
CONTROL ANTENNA-900MHZ-3DBI	28920901
CONTROL LIGHTNING PROTECTOR 0-3GHZ 90V	28920401
CABLE LMR 400-8 FEET	28920701
CABLE LMR 400-100 FEET	28920501
CONTROLLER INTERNET GATEWAY CONNECT X4 (Digi)	28920601
CONTROLLER INTERNET XBEE RF MODEM (Digi)	28920801
TRANSFORMER 100-240VAC IN / 24VDC OUT	22531001

## Service Parts - RRC for Beacon II and QRC

DESCRIPTION	PART NUMBER
CONTROLLER INTERNET GATEWAY CONNECTSP	28999401