TECHNICAL SUBMITTAL DATA SHEET

Wireless, App-Based Plumbing Leak Detection &
Automatic Water Main Shut-Off System

MODEL RSC-900-AW

TYPICAL INSTALLATIONS INCLUDE:

- Common-risk housing – condos and apartments
- Commercial office suites
- New and retrofit construction
- Vacation homes and other unattended properties

HIGHLY RECOMMENDED FOR:

- Multi-unit residential complexes
- Commercial office buildings
- Medical and assisted living facilities
- Any facility with a history of insurance claims for water damage

FEATURES:

- Mobile app provides automatic notifications and remote user interface, including manual valve shut-off
- Addressable sensors with high/low temperature alerts
- Full port valve sizes 1/2” to 1-1/4” dia.
- Supports multiple actuators for both hot and cold water lines
- IP68-rated actuator for indoor/outdoor use
- Available without shut-off valve/actuator for applications where you do not wish to interrupt the water flow
- Operates via wireless system network; does not use local Wi-Fi
- Cloud-based Central Monitoring Station access is available for commercial multi-unit applications
- Hub supports up to 64 total wireless devices; max. 4 wireless signal repeaters

APPLICATION CONSIDERATIONS:

The RSC-900 is a complete wireless, app-based system for managing indoor plumbing leaks, protecting properties and reducing financial losses. If the sensor detects a leak, it signals the valve to shut off and sends its location, alarm type and valve status back to the hub. The hub sends notifications to the user via the app. Fault notifications and status check-ins are communicated through the app from any Internet-enabled device. The system is also available without a shut-off valve and actuator for applications where interrupting the water flow is either not required or not desirable (order model RSC-900-W).

INSTALLATION OVERVIEW:

Hub:
Install within 5’ of the Internet router and a 120V AC wall outlet.

Actuator(s):
Install within 200’ of the hub*, on the main water feed line to the protected area. Multiple actuators can be installed where both hot and cold feed line control is required.

Water Flood Sensors:
Install within 200’ of the hub*, in areas where water from a leak is most likely to first accumulate.

* Repeater(s) may be used to extend range between hub and accessory (+200’ max.).

App:
Free download available for iOS or Android smart phones at the App Store or Google Play. Required for initial system installation and set-up.

Central Monitoring:
Optional cloud-based central monitoring allows multiple system viewing from one screen. Contact RDT for additional information – 888-771-4929 or info@reliancedetection.com.

*Hub and sensors are for interior use only. Actuator is IP68 rated for indoor or outdoor use. Do not install any components inside a metal cabinet.*
**RSC-900-AW TECHNICAL SUBMITTED DATA SHEET**

**ORDERING INFORMATION:**

<table>
<thead>
<tr>
<th>Valve Size</th>
<th>P/N</th>
<th>UPC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2”</td>
<td>RSC-900-AW-1/2</td>
<td>811475030078</td>
</tr>
<tr>
<td>3/4”</td>
<td>RSC-900-AW-3/4</td>
<td>811475030085</td>
</tr>
<tr>
<td>1”</td>
<td>RSC-900-AW-1</td>
<td>811475030092</td>
</tr>
<tr>
<td>1-1/4”</td>
<td>RSC-900-AW-1-1/4</td>
<td>811475030108</td>
</tr>
<tr>
<td>None</td>
<td>RSC-900-W</td>
<td>811475030177</td>
</tr>
</tbody>
</table>

**OPERATING SPECIFICATIONS:**

See charts at right for further detail.

**Valve**

Pressure Rating............ 600 WOG - 150 WSP  
Max. Temperature........... 366°F

**Actuator**

Max. Pressure............. 80 PSI

**Sensor**

Audible Alarm............... Yes

**MATERIALS:**

**Valve**

Body ....................... Low-lead brass  
End Connection ........... Low-lead brass  
Stem ....................... Low-lead brass  
Ball ....................... Low-lead brass (tea coated)

**CABLE LENGTHS:**

Hub Power Cord .......... 5’  
Ethernet Cable .......... 4’

**APPROVALS:**

**RSC-900 Wireless System FCC & Industry Canada Info**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**Certifications:**

- FCC: 2AFO1ICLMLF410 20798-CLMFLD10  
- IC: 2AFO1ICLMLCTRL10 20798-CLMLCTRL10  
- MA Board of Registration of Plumbers Approval – Code # P1-1018-40 (System)

**Communication Hub:**

IP Rating IEC60529  
Valve/Actuator: IP Rating IEC60529; IP68; ANSI 61/372 (Valve)  
MA Board of Registration of Plumbers Approval – Code # P1-1018-40 (System)

**AVAILABLE ACCESSORIES:**

- Extra Wireless Water Flood Sensors (RSC-900-W-001)  
- Wireless Rope-Style Water Sensor Kit (RSC-900-W-175)  
- Wireless Signal Repeater (RSC-900-X-200) – Max. 4 per system  
- Extra Wireless Actuator & Valve (RSC-900-W-310-X)

RDT recommends that RSC-900-AW installations be completed by a licensed plumber to ensure that all local code requirements are followed.

**DIMENSIONS & WEIGHTS:**

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
<th>Power Supply</th>
<th>Backup Battery</th>
<th>Primary Radio Frequency</th>
<th>Operating Temperature</th>
<th>Communication</th>
<th>Signal Range</th>
<th>Addressable?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hub</td>
<td>6 oz</td>
<td>External Adapter</td>
<td>(2) AA batteries</td>
<td>915 MHz</td>
<td>-4°F to 122°F (-20°C to 50°C)</td>
<td>Wi-Fi, Ethernet</td>
<td>200’</td>
<td>Yes</td>
</tr>
<tr>
<td>Actuator</td>
<td>13 oz</td>
<td>(4) CR123A batteries</td>
<td>2-year life</td>
<td>915 MHz</td>
<td>-4°F to 122°F (-20°C to 50°C)</td>
<td>Wireless RF</td>
<td>200’</td>
<td>Yes</td>
</tr>
<tr>
<td>Sensor</td>
<td>2 oz</td>
<td>(2) AAA batteries</td>
<td>2-year life</td>
<td>915 MHz</td>
<td>-4°F to 122°F (-20°C to 50°C)</td>
<td>Wireless RF</td>
<td>200’</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*Weight without accessories attached.*

**RSC-900 Shut-Off Valve Specifications**

<table>
<thead>
<tr>
<th>Size</th>
<th>Square</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>L</th>
<th>CH</th>
<th>M</th>
<th>P</th>
<th>CV</th>
<th>PSI</th>
<th>LBS</th>
<th>IN-LBS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2”</td>
<td>0.28</td>
<td>0.35</td>
<td>1.42</td>
<td>0.24</td>
<td>0.36</td>
<td>0.08</td>
<td>0.98</td>
<td>1.32</td>
<td>0.59</td>
<td>2.64</td>
<td>1.06</td>
<td>0.22</td>
<td>0.56</td>
<td>18.84</td>
<td>580</td>
<td>0.21</td>
<td>53.10</td>
<td></td>
</tr>
<tr>
<td>3/4”</td>
<td>0.35</td>
<td>0.35</td>
<td>1.42</td>
<td>0.24</td>
<td>0.36</td>
<td>0.08</td>
<td>0.98</td>
<td>1.57</td>
<td>0.64</td>
<td>2.99</td>
<td>1.26</td>
<td>0.22</td>
<td>0.75</td>
<td>34.10</td>
<td>580</td>
<td>0.40</td>
<td>53.10</td>
<td></td>
</tr>
<tr>
<td>1”</td>
<td>0.35</td>
<td>0.35</td>
<td>1.42</td>
<td>0.24</td>
<td>0.36</td>
<td>0.12</td>
<td>0.98</td>
<td>1.93</td>
<td>0.75</td>
<td>3.64</td>
<td>1.61</td>
<td>0.24</td>
<td>0.95</td>
<td>47.71</td>
<td>580</td>
<td>0.75</td>
<td>53.10</td>
<td></td>
</tr>
<tr>
<td>1-1/4”</td>
<td>0.35</td>
<td>0.35</td>
<td>1.42</td>
<td>0.24</td>
<td>0.36</td>
<td>0.12</td>
<td>0.98</td>
<td>2.30</td>
<td>0.84</td>
<td>4.02</td>
<td>1.97</td>
<td>0.24</td>
<td>1.18</td>
<td>110.42</td>
<td>580</td>
<td>1.05</td>
<td>53.10</td>
<td></td>
</tr>
</tbody>
</table>

(In-LBS) Torque Valves are measured in laboratory tests under the following conditions: Temperature: 68°F; Pressure: 0 PSI; Fluid: Purified Water.