

# TECHNICAL SUBMITTAL DATA SHEET

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

Job Name: \_\_\_\_\_

Job Location: \_\_\_\_\_

Engineer: \_\_\_\_\_

Engineer Approval: \_\_\_\_\_

Contractor: \_\_\_\_\_

Contractor Approval: \_\_\_\_\_

Contractor P.O.: \_\_\_\_\_

Representative: \_\_\_\_\_

### 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
- App supports creation of multiple "Zones" to monitor/control designated areas or plumbing subsections within a single system
- Hub supports up to 64 total wireless devices; max. 4 wireless signal repeaters

Communications Hub  
(Ethernet model shown)

Wireless  
Actuator

Shut-Off Valve

RSC-900  
Mobile App

Wireless  
Water Sensors

#### 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:** Choose between Wi-Fi or Ethernet connectivity.

**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. Great for commercial multi-unit applications. Contact RDT for additional information – 888-771-4929 or [info@reliancedetection.com](mailto:info@reliancedetection.com).



# RSC-900-AW TECHNICAL SUBMITTAL DATA SHEET

## ORDERING INFORMATION:

Valve	Hub	P/N	UPC
1/2"	Eth.	RSC-900-AW-1/2	811475030078
1/2"	WiFi	RSC-900-AW-WIFI-1/2	811475030276
3/4"	Eth.	RSC-900-AW-3/4	811475030085
3/4"	WiFi	RSC-900-AW-WIFI-3/4	811475030283
1"	Eth.	RSC-900-AW-1	811475030092
1"	WiFi	RSC-900-AW-WIFI-1	811475030269
1-1/4"	Eth.	RSC-900-AW-1-1/4	811475030108
1-1/4"	WiFi	RSC-900-AW-WIFI-1-1/4	811475030290
None	Eth.	RSC-900-W	811475030177
None	WiFi	RSC-900-W-WIFI	811475030252

## 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, Stem, End Connection.... Low-lead brass

End Connection ..... Low-lead brass

Ball ..... Low-lead brass  
(tea coated)

Ball Seats..... PTFE

O-Rings ..... FKM (Viton®)

## CABLE LENGTHS:

Hub Power Cord ..... 5'

Ethernet Cable..... 4' (Ethernet hub models)

## APPROVALS:

Certifications:	FCC	IC
Flood Sensor	2AFOICLMFLD10	20798-CLMFLD10
Hub	2AFOICLMCTRL10	20798-CLMCTRL10
Actuator	2AFOICLMASOU20	20798-CLMASOU20

### 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.

Communication Hub: IP Rating IEC60529

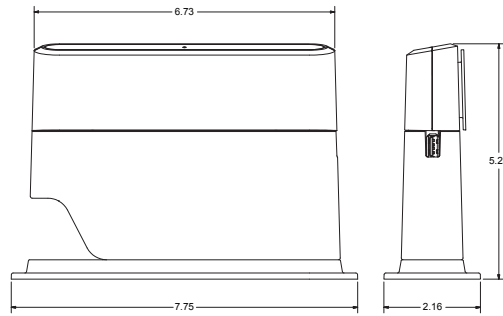
Valve/Actuator: IP Rating IEC60529; IP68;

ANSI 61/372 (Valve)

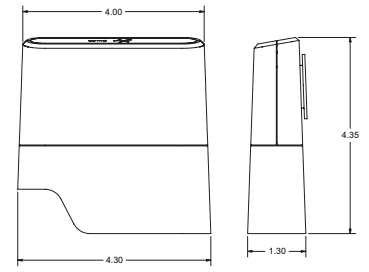
MA Board of Registration of Plumbers Approval -  
Code # P1-1018-40 (System)

## DIMENSIONS & WEIGHTS:

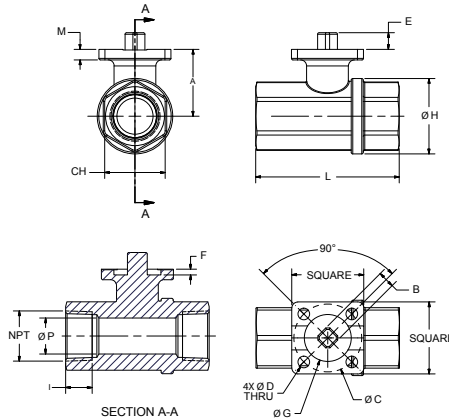
### Communications Hub (Ethernet) ➤



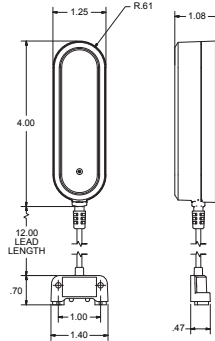
### Communications Hub (Wi-Fi) ➤



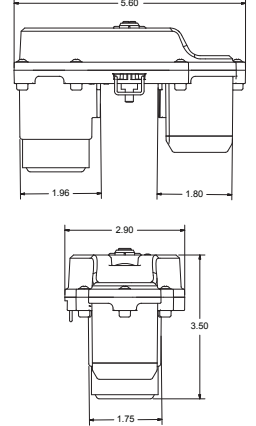
### Shut-Off Valve ➤



### Wireless Sensor ➤



### Wireless Actuator ➤



### RSC-900 Shut-Off Valve Specifications

Size	Square	A	B	C	D	E	F	G	H	I	L	CH	M	P	CV	PSI	LBS	IN-LBS
1/2"	1.50	1.28	0.35	1.42 (ISO F03)	0.24	0.35	0.08	0.98	1.32	0.59	2.64	1.06	0.22	0.56	18.84	580	0.21	53.10
3/4"	1.50	1.36	0.35	1.42 (ISO F03)	0.24	0.35	0.08	0.98	1.57	0.64	2.99	1.26	0.22	0.75	34.10	580	0.40	53.10
1"	1.50	1.79	0.35	1.42 (ISO F03)	0.24	0.35	0.12	0.98	1.93	0.75	3.54	1.61	0.24	0.95	49.71	580	0.75	53.10
1-1/4"	1.50	1.93	0.35	1.42 (ISO F03)	0.24	0.35	0.12	0.98	2.30	0.84	4.02	1.97	0.24	1.18	102.88	580	1.05	53.10

(IN-LBS) TORQUE VALVES ARE MEASURED IN LABORATORY TESTS UNDER THE FOLLOWING CONDITIONS: TEMPERATURE: 68°F; PRESSURE: 0 PSI; FLUID: PURIFIED WATER.

### RSC-900 Wireless Component Specifications

Component	Weight*	Power Supply	Backup Battery	Primary Radio Frequency	Operating Temperature	Communication	Signal Range	Addressable?
Communication Hub	≤ 6 oz (170 gm)	External Adapter Input 110-240V AC	(2) AA batteries	915 MHz	-4°F to 122°F (-20°C to 50°C)	Wi-Fi or Ethernet	200'	Yes
Wireless Actuator (IP68)	13 oz (369 gm)	(4) CR123A batteries 2-year life	N/A	915 MHz	-4°F to 122°F (-20°C to 50°C)	Wireless RF	200'	Yes
Wireless Sensor	2 oz (57 gm)	(2) AAA batteries 2-year life	N/A	915 MHz	-4°F to 122°F (-20°C to 50°C)	Wireless RF	200'	Yes

\* Weight without accessories attached. Hub weight is model dependent.

## 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.



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