

# RS500 Device User Manual



## Basic Overview

The primary function of an RS500 Device is enabling wireless operation of equipment wired to it. The RS Device operates as a control module for standard PipeBurst Pro 5 equipment including the WaterValve and FloMeter.

## RS500 Device Features

<i>Dimensions</i>	4-1/8" W x 4-3/4" H x 1-1/4" D
<i>Power Source</i>	AC Power Adapter
<i>Built-in Sensors</i>	Ambient Air Temperature Sensor
	Tamper Alert Sensor
<i>Voltage</i>	5 VDC
<i>Housing</i>	Black ABS Plastic
<i>Audible Notification</i>	Internal Speaker
<i>Wireless Frequency</i>	915 MHz
<i>Input 1 &amp; 2 Options</i>	WaterValve
	FloMeter



## Customer Support

GreenField Direct, LLC  
14015 238<sup>th</sup> Street  
Greenwood, NE 68366  
[www.pipeburstpro.com/contact](http://www.pipeburstpro.com/contact)  
E-Mail: [help@greenfelddirect.com](mailto:help@greenfelddirect.com)  
Phone: 866-466-LEAK (5325)  
Hours of Operation: Weekdays 8:00 AM – 5:00 PM CT

## Warranty Information

PipeBurst Pro Products 2/5/7 Year Limited Warranty  
Please visit:  
[www.pipeburstpro.com/warranty](http://www.pipeburstpro.com/warranty) to review full warranty details

# Installation and Operation of an RS500 Device

## Device association to a Gateway

1. On your ionleaks dashboard, go to the device tab and select add new device.
2. Enter in the device ID and device key for the RS500 and click add. Repeat this step for each sensor that needs to be added before proceeding to step 3.
3. Power on the device with the provided 5 VDC power supply.

## RS500 Device Placement

1. Place an RS500 Device at the desired location.
2. Complete any necessary wiring of hardware components to the RS500.
3. Apply AC power to the RS500 device with the provided adapter.
4. Once an RS Device is in its desired location and running on AC power, press and release the relay button on the side of the RS to ensure functionality.

## RS Device Standard Settings Summary

Setting	Description
WaterValve	WaterValve Mode gives feedback and control for connected WaterValves. A WaterValve Can be controlled locally via the pushbutton on the side of the RS500.
FloMeter	FloMeter Mode allows an RS500 to read and report FloMeter data to Ionleaks.com. Users can set custom flow thresholds using Ionleaks.com to alert if abnormal flow is detected. Ionleaks.com is required for FloMeter functionality.
Tamper Alert	If the lid of the sensor is removed, a tamper alert is triggered.
Data Recording Interval	The sensor is set to check-in with the system at a user determined amount of time.

## Warnings and Precautions

- RS Devices operate on communications frequencies which are subject to FCC rules and regulations. Specific information about device conformity can be found at: <https://www.pipeburstpro.com/disclaimers/>
- Placing RS Devices near large metal objects may decrease or block wireless coverage.
- End User is responsible that the RS Device functionality and installation meets the desired requirements.
- This manual may be updated or changed without advanced notice
- To learn about changing settings via ionleaks.com, refer to the ionleaks.com User Manual.

### Wireless Regulatory Information

Model: RS500  
FCC ID: NCM-RS500  
IC: 2734A-RS500  
Frequency Range: 915 MHz

### Maintenance Tips for Optimal Device Performance

- Clean RS500 Device housing, on a regular basis, with a damp cloth.

# RS500 Device Wiring Diagrams



LED	Function	On	Off
1	Power	Power On	Power Off
2	Radio	Radio transmitting	Sleep
3	Input 1	Input Closed	Input Open
4	Relay 1 (NC)	Relay Open	Relay Closed
5	Input 2	Input Closed	Input Open
6	Relay 2 (NC)	Relay Open	Relay Closed

# ***RS Device Wiring Diagrams***

## Key Components



5VDC  
in

Relay  
button

Wire Terminals

Wire  
Management  
Compartment

# ***RS Device Wiring Diagrams***

WaterValve - Control + Feedback



**IN 1**

**SIG:** Green

**GND:** Black

**RLY 1**

**COM:** Red

**NC:** White

If using two WaterValves, repeat wiring for  
Input 2 / Relay 2

# ***RS Device Wiring Diagrams***

## FloMeter



**IN 2**

**SIG:** Green

**GND:** Black

If using two FloMeters, repeat wiring for Input 1

# ***RS500 FCC-ISED Declaration***

## **FCC § 15.19 Labelling requirements**

This device complies with part 15 of the FCC Rules and Innovation, Science and Economic Development Canada (ISED) license-exempt RSS standard(s). 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.

## **FCC § 15.21 Information to user**

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

## **FCC § 15.105 statement**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## **RF Exposure Requirements**

To comply with FCC RF exposure compliance requirements, the device must be installed to provide a separation distance of at least 20 cm from all persons.

## **ISED CANADA Statements**

Le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

## **Canada Class B statement**

This Class B digital apparatus complies with Canadian ICES-003

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

## **RF Exposure Requirements**

This equipment complies with Canada radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body.

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements du Canada établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.