WaterMind v2
Advanced Logger

Installation Instructions

1 - Pre-installation Precaution

WaterMind v2 Advanced Logger is an accurate measuring device to be connected to a pipe for pressure monitoring and/or to a water meter via wired pulse input and/or to an external power supply. It has built-in cellular equipment for data transfer.

To protect your safety, to ensure the proper measuring performance and to comply with warranty terms, please respect the installation procedure described in this document.

1.1 Safety Advice for Pressure Monitoring Only

Only qualified and trained personnel, familiar with hazards linked to water networks at high pressures, should install the WaterMind v2 Advanced Logger.

1.2 Battery Handling

Batteries pose a fire, explosion and severe burn hazard. Do not short circuit, disassemble, dispose of in fire, heat, expose to water, puncture or crush. Do not connect in reverse polarity.
Manufacturers Material Safety Data Sheets are available upon request.

1.3 Cellular Network and Battery Lifetime

WaterMind v2 Advanced Logger uses GSM/GPRS/3G communication networks for data transfer: 850/900/1800/1900MHz (GSM) and 800/850/900/1900/2100MHz (UMTS). The performance of these networks depends on many parameters under the responsibility of cellular operators and in no case is Itron's responsibility. .

However, the battery lifetime is impacted by the performance of the cellular network that it is connected to. The estimated battery lifetime is based on a standard and correct performance of the cellular network and the respect of the recommended configuration by the user.

1.4 Declaration and Environmental Protection

WaterMind v2 Advanced Logger is conform with both relevant Union Harmonization Legislation Directives: 2014/53/EU (RED) and 2011/65/EU (RoHS 2).

These approvals only apply to the WaterMind v2 Advanced Logger. Any accessories that may be delivered with the device are not covered by these approvals.

WaterMind v2 Advanced Logger is protected against dust ingression, water jets and permanent immersion (IP68 acc. to EN60529)

Full declaration of conformity is available at **www.itron.com/watermind**

1.5 Proximity to Users (RF Exposure)

This device in intended to be installed in un-manned locations. We recommend to maintain a distance of 0.25m (25cm) between the device and users.

2 - WaterMind Advanced Logger Overview

1	One-quarter Turn screw
2	Bidirectional Flow Input (Pulse)
3	Pressure Transducer
4	USB Connection for PC
5	Label

www.itron.com
9 rue Ampère
71031 Mâcon, France
Country of Origin: UK

Itron

WaterMind Advanced Logger

WM_LOG_1P_1Pr_3G
S/N: 150156
2018/04/01

1	Itron Logo	**8**	Country of Origin marks
2	Product Name	**9**	Crossed out wheeled dust bin
3	Product Code	**10**	QR Code
4	Serial Number		Product Code
5	Manufacturing Date		Serial Number
6	Itron Web Address		Manufacturing Date
7	Itron Address	**11**	CE Marking
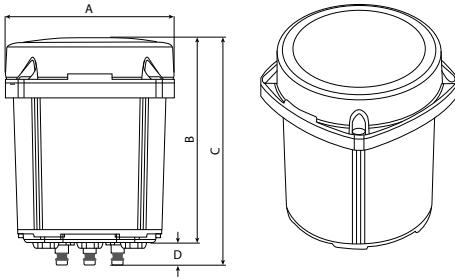
Dimensions

Diameter	**A**	mm	115
Height	**B**	mm	140
Total Height	**C**	mm	155
Fast Couples Height	**D**	mm	15

⚠️ It is strongly recommended to install Watermind in conditions that prevent freezing, especially for models with pressure sensors, where water goes through the coiled tube to the product.

Ambient Operating Temperature	-10°C to +50°C
Battery Lifetime	5 years minimum (with one daily dial-up, under normal working conditions, depending on configuration, temperature and location)

3 – Inventory

WaterMind v2 Advanced Logger is provided with a flow cable for pulse input connection and a coiled tube per pressure transducer for pressure input, at no additional cost.

However, the USB cable is not included. It can be ordered as a spare part.

WM_LOG_SP_FLOW_C
WaterMind Spare Flow Cable

WM_LOG_USB_CABLE
WaterMind USB Cable
(Spare part)

WM_LOG_SP_COILTUBE
WaterMind
Spare Coiled Tube for pressure
transducer conncetion (2.8m)

4 – Installation

WaterMind installation is very quick and easy. Below the pre-requirements and main steps are outlined.

4.1 – Pre-Installation Requirements

There are some elements that are required before going on field to install WaterMind:

- WaterMind Configurator software installed on a laptop with Windows OS.
- Tenant settings file containing name, ID and cryptographic access key.
- Tenant-Specific URL and port.

Configurator.exe

These elements are all provided upon the opening of a service requested, that can be managed by your local Itron representative.

4.2 – Installation Steps

A - **Open the cover** using a small screwdriver. A quarter-turn is required to loosen for each of the 4 fasteners.

x4

Screwdriver 5mm

B - **Connect Battery**. WaterMind is delivered with the internal battery disconnected to save energy during transport and storage periods.
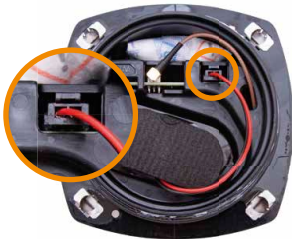
C - **Insert the SIM Card** in the slot with the SIM symbol.
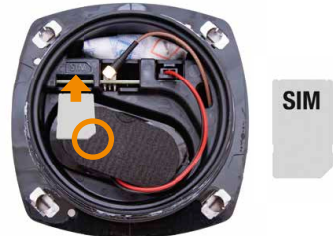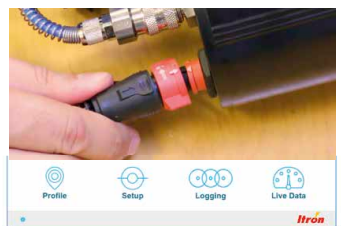
SIM

D - Press and click to **Close the cover.** Pay attention to ensure the cover fits the body.

Bracket

Label

Press/ Click
x4 Screws

E - **Commission the WaterMind v2 Advanced logger** in the system. This can be done at the office, before going on field.

Profile   Setup   Logging   Live Data

Connect the WaterMind v2 Advanced Logger to a laptop using the USB cable and configure to set the folowing parameters:

- Device name
- Meter serial number
- Tenant settings
- Pulse weight
- Connetion type (2/ 3 /5 wires)
- Cellular network params: APN, user and password

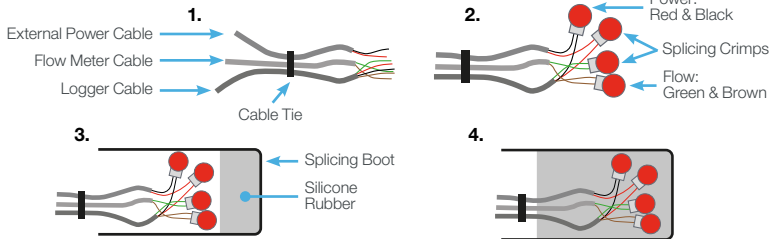You can set up and change most of the parameters remotely, at a later time.

ⓘ You may wish to configure multiple dialups to monitor logger operation on the day of deployment. Remember to revert to a more permanent setting (eg. daily) after the correct logger operation is verified.

F - Select the right **wire mapping** according to the meter you are connecting to the Watermind v2 Advanced Logger.

WaterMind Adv. Logger	Cyble Sensor / SharpFlow (5 wires)	Cyble Sensor (2 wires)	Other Meter (3 wires)
---	White - Low Frequency	---	---
Green - Forward Pulse	Grey - High Frequency	White - Low Frenquency	Yellow - Forward Pulse
Brown - Ground	Brown - Ground	Brown - Ground	Brown - Ground
Yellow - Flow Direction / Reverse Pulse	Yellow - Dir	---	White - Reverse Pulse
Orange - Tamper	Green - Tamper	---	---
Red +ve DC (6V to 30V)	---	---	---
Black -ve DC (6V to 30V)	---	---	---

G - **Splice the Pulse Input Cable** following these steps.

1.

External Power Cable
Flow Meter Cable
Logger Cable
Cable Tie

2.

Power: Red & Black
Splicing Crimps
Flow: Green & Brown

3.

Splicing Boot
Silicone Rubber

4.

H - **Connect Pulse and Pressure Inputs.**

I - **Meter Serial Number & Register Setup**

Check that the pre-configured meter serial number is the right one.

Set up the value of the water meter register.

Force the dial-up to update the server.