

Charter Township of West Bloomfield

Water Utilities Department

2400 Haggerty Road
West Bloomfield, MI. 48323
(248) 451-4780



Dear Water Customer:

The newly installed water meter at this service address is technologically advanced. This system affords you the ability to monitor water usage in real-time, including setting up alerts to send you notifications of any potential issues, such as internal plumbing leaks. Please know that the new meter is a non-moving part device that registers very low flows of water, where older style meters did not pick up low flows, which are typically associated with undetectable water leakage. Running toilets are a common culprit of escalating water usage, which many times is unknown to water customers. Kindly understand that plumbing leaks are the sole responsibility of private property owners and not the Township Water Department.

In order to take advantage of the beneficial features of this system, see the attached 2-page instruction sheet that steps you through setting up an account on your computer. For your protection, your account application is secured with high-level encryption. Once you have set up your online account you will also have access to a Mobile Cellular Phone Application. The **EyeOnWater** mobile app is available through the **Apple Store (IOS)** or **Google Play Store (Android)**. Once you are within the mobile application, you will use your computer website login credentials. We suggest that whomever is responsible for maintenance and/or paying water and sewer bills for the property be provided access to the mobile application to receive alerts for reviewing water volume usage.

****Important Note:** After the new meter has been installed, allow 7 business days before setting up the EyeOnWater application. This time affords the Water Department an opportunity to establish your new account within our billing system.

If there should be any questions or you may require further assistance, please feel free to reach out to our Billing Division at **(248) 451-4832**. We are here to help you!

We highly value our water customers and continue to appreciate the privilege of providing quality and responsive water and sewer service to West Bloomfield.



EyeOnWater[®] See Your Water Usage

Follow these simple instructions to see your water usage information

1

Steps to Create an EyeOnWater Account

1. Enter your service or billing address ZIP/Postal code
2. Enter your account number as it appears on your water bill.

Don't have a copy of your water bill?

Contact your Utility Management

3. Enter & confirm your email address
4. Create & confirm your password
5. Read and accept Terms of Use

Service or Billing ZIP/Postal Code:

Service or Billing ZIP/Postal Code

Account Number:

Enter your Account Number

Some utilities use a customer number, others omit hyphens, trailing zeros and non-numeric characters. When in doubt, consult your utility to learn which number to use when creating an EyeOnWater account.

Next

Already have an account? Sign in here.

Visit <https://eyeonwater.com/signup> to create your online account. Enter your service or billing ZIP/Postal code and your account number

2

Steps to Create an EyeOnWater Account

1. Enter your service or billing address ZIP/Postal code
2. Enter your account number as it appears on your water bill.

Don't have a copy of your water bill?

Contact your Utility Management

3. Enter & confirm your email address
4. Create & confirm your password
5. Read and accept Terms of Use

Full Name

JANE SMITH

Email Address

jsmith@example.com

Confirm Email Address

jsmith@example.com

Password

Password Strength

Confirm Password

☒ I have read the **Terms of Use** for this application and agree to the provisions.

Next

Already have an account? Sign in here.

Enter Your name & email address. Confirm the address and then create and create and confirm password. Passwords must be 8-16 characters long

3



Did you know?

One in eight people worldwide do not have access to clean water, according to the World Health Organization.

We have sent a verification email to the following address, please open the link in the email and return to this app to complete the sign up process.

Email Address:

jsmith@example.com

Resend Email

Check your email for the verification message that has just been sent



EyeOnWater[®] See Your Water Usage

Follow these simple instructions to see your water usage information

4

Inbox (1)
Starred
Sent Mail
Drafts
More ▾



Water Utility
to me

Hi Jane Smith,

You're almost finished signing up for online access to your Water Utility account. Please click the verification link below to activate your account and sign in.

[Click here](#) to verify your email address.

Click on the link in the email to verify your email address

5



My Account

Email Address:

jsmith@example.com

Password:

●●●●●●●●●●

Did you know?

One in eight people worldwide do not have access to clean water, according to the World Health Organization.

Sign In

After Clicking the link in your email, Enter your email address and password to sign up

6



Once your logged in you'll be able to view your water consumption and even set a leak



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17 August 2023

Ed Haapala – Utilities Director
West Bloomfield Township
2400 Haggerty Road
West Bloomfield, MI 48323

The ORION® Cellular endpoint device meets all applicable legal requirements of Part 15, Part 22, Part 24, and Part 27 of the Federal Communications Commission (FCC). In addition, radio frequency signals broadcast from the endpoint devices are well below the levels most people come in contact with on a typical day in their home. Devices such as television sets, wireless phones, and cell phones all utilize radio frequency technology that provides much greater contact to radio frequency signals.

The ORION Cellular endpoint operates like a cell phone and under normal operation awakens up to four times per day to transmit reading data. The endpoint also transmits a very short message at very low power approximately five times each minute. Under typical operation, the endpoint transmits reading data for seconds per day meaning that the endpoint transmits as little energy as a brief cell phone call.

Additionally, the exposure to radio frequency signals decreases with the square of the distance to the device. This means the farther away anyone is from the radio frequency device, the less the (RF) contact. For example, the energy measured two feet away from the endpoint is 1/4 of the energy measured at a distance of one foot. Since the ORION endpoint is typically located in the basement, on the outside of the house or in a pit below grade, the extended distance and material between the endpoint and the individual further reduces contact with radio frequency signals.

Further information regarding the ORION endpoint and its approval for use in water meter reading applications can be found on the FCC website.

Sincerely,
BADGER METER, INC.

A handwritten signature in black ink that reads 'Kristie Anderson'.

Kristie Anderson
Marketing Manager

cc: Megan Peel



ORION® Cellular Endpoints

This document provides information regarding radio frequency (RF) of the ORION® Cellular endpoint.

Badger Meter is the market leader for utility cellular solutions, having deployed millions of endpoints with thousands of customers.

Cellular technology for machine-to-machine applications is designed to ensure transmission accuracy, immunity from outside interference and other forms of attenuation to avoid the loss of customer data. Likewise, the ORION Cellular endpoint is designed to eliminate interference from outside electromagnetic and RF energy fields. As its primary communication, the ORION Cellular endpoint utilizes licensed frequencies that are specifically set aside for its cellular communications, recognized as one of the most secure approaches to network communication available. Specific configurations also transmit an RF message to facilitate troubleshooting in the field.

FAQS

What standards related to RF emissions apply to ORION Cellular endpoints?

In the United States, FCC and CTIA are the bodies responsible for regulating domestic wireless telecommunications programs and policies, including licensing, and are responsible for implementing rules and regulations regarding frequency allocations, operating and design characteristics of equipment, power limits and testing/certification requirements, among other responsibilities. As its primary communication, the ORION Cellular endpoint utilizes licensed frequencies that are specifically set aside for its cellular communications. ORION Cellular endpoints utilize licensed frequencies to avoid interference from unauthorized users. Certain configurations of the ORION Cellular endpoint include an additional RF message for troubleshooting that communicates on the FCC-regulated 902-928 MHz frequency. ORION Cellular endpoints comply with Part 15, Part 22, Part 24 and Part 27 of FCC Rules.

Are there any health impacts related to these RF emissions?

The radio frequency signals broadcast from the ORION Cellular endpoint are well below the levels most people come into contact with on a typical day in their home. Devices such as televisions, wireless phones and cell phones all utilize radio frequency technology that provides much greater contact to radio frequency signals. The endpoint operates like a cell phone and under normal operation will awaken approximately four times per day to communicate data via the cellular network. Some configurations include an additional RF message for troubleshooting. The duration of each of these RF transmissions is 1.4 milliseconds, equating to approximately 8 seconds of transmission time per day. This means that the endpoint transmits as little energy as a brief cell phone call.

Additionally, the exposure to radio frequency signals decreases with the square of the distance to the device. This means the farther away anyone is from the RF device, the less the radio frequency contact. For example, the energy measured two feet away from the endpoint is 1/4 of the energy measured at a distance of one foot. Since the ORION endpoint is typically located in the basement, on the outside of the house or in a pit below grade away from the house, the extended distance and material between the endpoint and the individual further reduces contact with radio frequency signals.

What is the output power of the ORION Cellular endpoint during a data transmission?

The ORION Cellular endpoint is designed for reliable data delivery over long distances, transmitting at a maximum power that is governed by the cellular standard, 23 dBm (0.20 W). For configurations that support the RF message for troubleshooting, the RF broadcast will be at approximately 10 dBm.

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What frequencies do ORION Cellular endpoints utilize?

As its primary communication, the ORION Cellular endpoint utilizes licensed frequencies that are specifically set aside for cellular communications. Unlike many AMI solutions that use shared frequencies and bandwidth, ORION Cellular endpoints utilize licensed frequencies to avoid interference from unauthorized users. Endpoint configurations that support the RF message for troubleshooting communicate on the FCC-regulated 902-928 MHz frequency. ORION Cellular endpoints comply with Part 15, Part 22, Part 24 and Part 27 of FCC Rules.

ORION CELLULAR ENDPOINT CONFIGURATIONS

Endpoint	Troubleshooting Message
ORION Cellular C	Includes RF and IR messages for troubleshooting
ORION Cellular CS	Secondary carrier; includes RF and IR messages for troubleshooting
ORION Cellular LTE-M	Includes RF and IR messages for troubleshooting
ORION Cellular LTE-MS	Secondary carrier; includes RF and IR messages for troubleshooting
ORION Cellular HLA	Includes IR message for troubleshooting

TERMS

dBm	decibel-milliwatts
IR	infrared
RF	radio frequency
W	watts

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www.badgermeter.com



ORION® Cellular Endpoints

This document provides information regarding radio frequency (RF) of the ORION® Cellular endpoint.

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Cellular technology for machine-to-machine applications is designed to ensure transmission accuracy, immunity from outside interference and other forms of attenuation to avoid the loss of customer data. Likewise, the ORION Cellular endpoint is designed to eliminate interference from outside electromagnetic and RF energy fields. As its primary communication, the ORION Cellular endpoint utilizes licensed frequencies that are specifically set aside for its cellular communications, recognized as one of the most secure approaches to network communication available. Specific configurations also transmit an RF message to facilitate troubleshooting in the field.

Endpoint	Troubleshooting Message
ORION Cellular LTE-M	Includes RF and IR messages for troubleshooting
ORION Cellular LTE-MS	Secondary carrier; includes RF and IR messages for troubleshooting
ORION Cellular C	Includes RF and IR messages for troubleshooting
ORION Cellular HLA	Includes IR message for troubleshooting

NOTE: For the ORION Cellular LTE-MP endpoint, see the *ORION Cellular LTE-MP Endpoint product data sheet*, available at www.badgermeter.com.

TERMS

dBm	decibel-milliwatts
IR	infrared
RF	radio frequency
W	watts

FAQ

What frequencies do ORION Cellular endpoints utilize?

As its primary communication, the ORION Cellular endpoint utilizes licensed frequencies that are specifically set aside for its cellular communications. Unlike many AMI solutions that use shared frequencies and bandwidth, ORION Cellular endpoints utilize licensed frequencies to avoid interference from unauthorized users. Endpoint configurations that support the RF message for troubleshooting communicate on the FCC-regulated 902-928 MHz frequency. ORION Cellular endpoints comply with Part 15, Part 22, Part 24, and Part 27 of FCC Rules.

Are ORION Cellular endpoints certified by the FCC?

The ORION Cellular endpoint device meets all applicable legal requirements of Part 15, Part 22, Part 24, and Part 27 of the Federal Communications Commission (FCC).

What is the output power of the ORION Cellular endpoint during a data transmission?

The ORION Cellular endpoint ensures reliable, long distance data delivery at a maximum transmission power that is governed by the cellular standard, 23 dBm (0.20 W).

For configurations that support the RF message for troubleshooting, the RF backup broadcast will be at approximately 10 dBm.

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Are there any health hazards from an ORION Cellular endpoint transmission?

The radio frequency signals broadcast from the ORION Cellular endpoint are well below the levels most people come into contact with on a typical day in their home. Devices such as television sets, wireless phones, and cell phones all utilize radio frequency technology that provides much greater contact to radio frequency signals. The endpoint operates like a cell phone and under normal operation will awaken several times per day (four transmissions per day is expected) to communicate data. Under typical operation, the endpoint transmits reading data for seconds per day, meaning that the endpoint transmits as little energy as a brief cell phone call.

The ORION Cellular endpoint meets the following RF exposure standards:

FCC

In the United States, FCC and CTIA are the bodies responsible for regulating domestic wireless telecommunications, programs and policies, including licensing, and are responsible for implementing rules and regulations regarding frequency allocations, operating and design characteristics of equipment, power limits and testing/certification requirements, among other responsibilities. As its primary communication, the ORION Cellular endpoint utilizes licensed frequencies that are specifically set aside for its cellular communications. Unlike many AMI solutions that use shared frequencies and bandwidth, ORION Cellular endpoints utilize licensed frequencies to avoid interference from unauthorized users. For its RF back-up message, the ORION Cellular endpoint communicates on the FCC-regulated 902-928 MHz frequency. ORION Cellular endpoints comply with Part 15, Part 22, Part 24, and Part 27 of FCC Rules.

OSHA

Under Federal Occupational Safety and Health Administration (OSHA) regulations, batteries used in ORION endpoints are classified as a manufactured article and do not require a Safety Data Sheet (SDS). While batteries within ORION endpoints are completely encapsulated in a hardened epoxy, if desired, an SDS or information sheet for 'lithium thionyl chloride batteries' can be obtained via internet search.

To help provide general guidance for utilities interested in disposing of endpoints that contain lithium thionyl chloride batteries, Badger Meter has created a handling and recycling safety guide, available upon request.

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