

Avoid the Truck Roll

Survey of Remote Shutoff Meters

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Objectives & Introductions

Objective

Introduce remote shutoff technology and discuss features and products currently on the market.



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Meter Shutoff Options

Roll a Truck



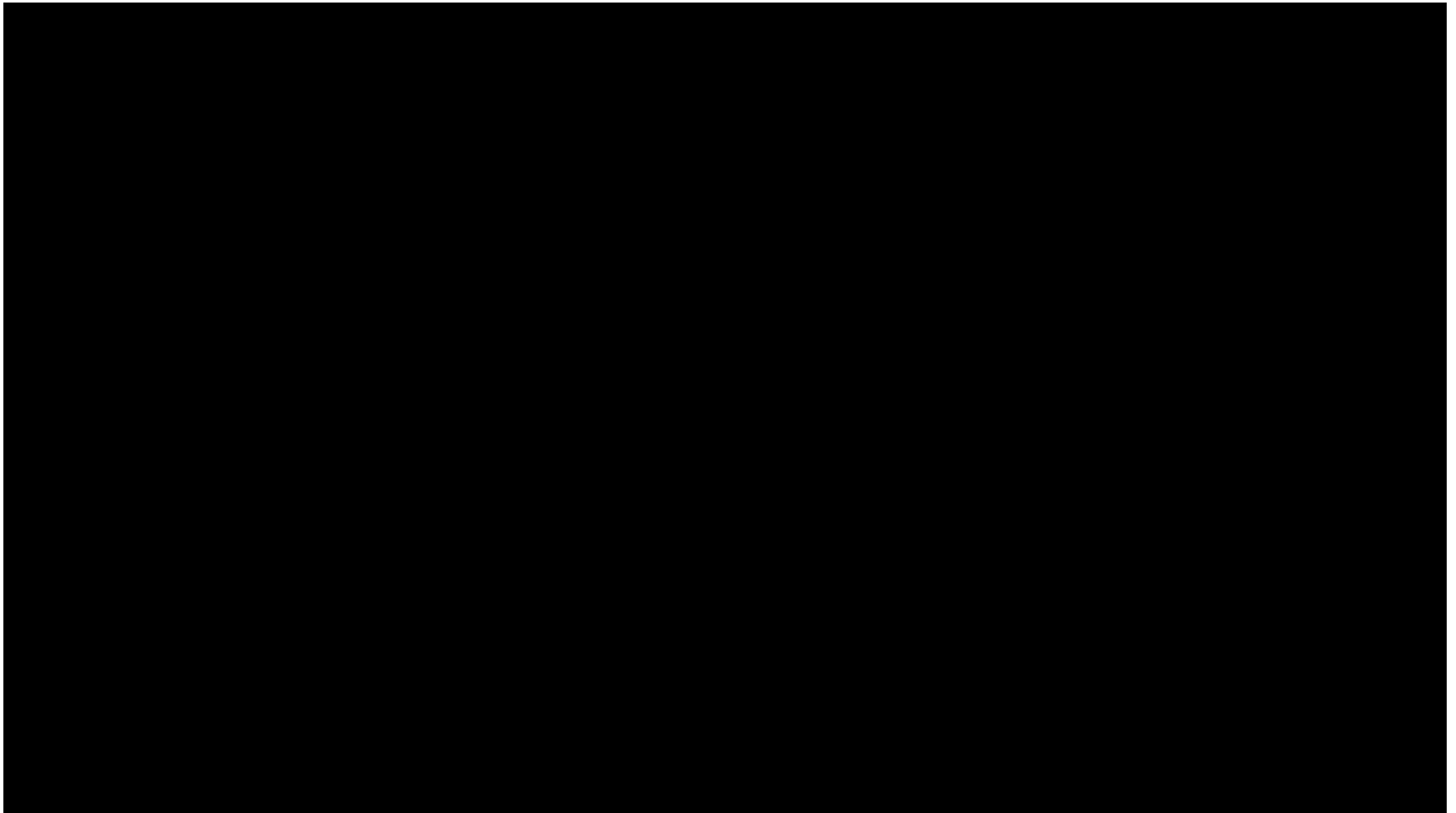
Push a Button

OR





How It Works – Push of a Button





Equipment Required

Push a Button



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Anyone using remote shutoff technology?



What are your thoughts on remote shutoff technology?

What concerns do you have?

What features are important?



Levels of Flexibility

- **Separate Radio for Valve**
- **Cellular**
- **Bluetooth**
- **AMR and AMI**





Add Remote Shutoff to Any Meter

Smart Earth Technologies
SETflow 100 Smart Valve



kamstrup

Itron AMR/AMI
100W+



Bluetooth



Integrated Remote Shutoff

Mueller 420 Remote Disconnect



Meter Technology

- Nutating Disc
- Pilot Valve

Meter Lay Length

- 7.5" – 5/8" x 3/4"

Communication

- AMR or AMI
- Maintenance Radio

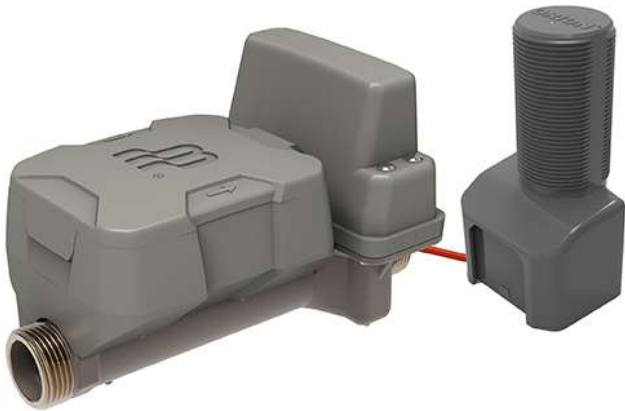
Control

- Web Enabled Device



Integrated & Modular Remote Shutoff

Badger Meter E-Series Ultrasonic Plus



Meter Technology

- Ultrasonic
- Magnetically Controlled Gate Valve

Meter Lay Length

- 7.5" – 5/8" x 3/4" and 3/4"
- 9" – 3/4" and 3/4" x 1"

Communication

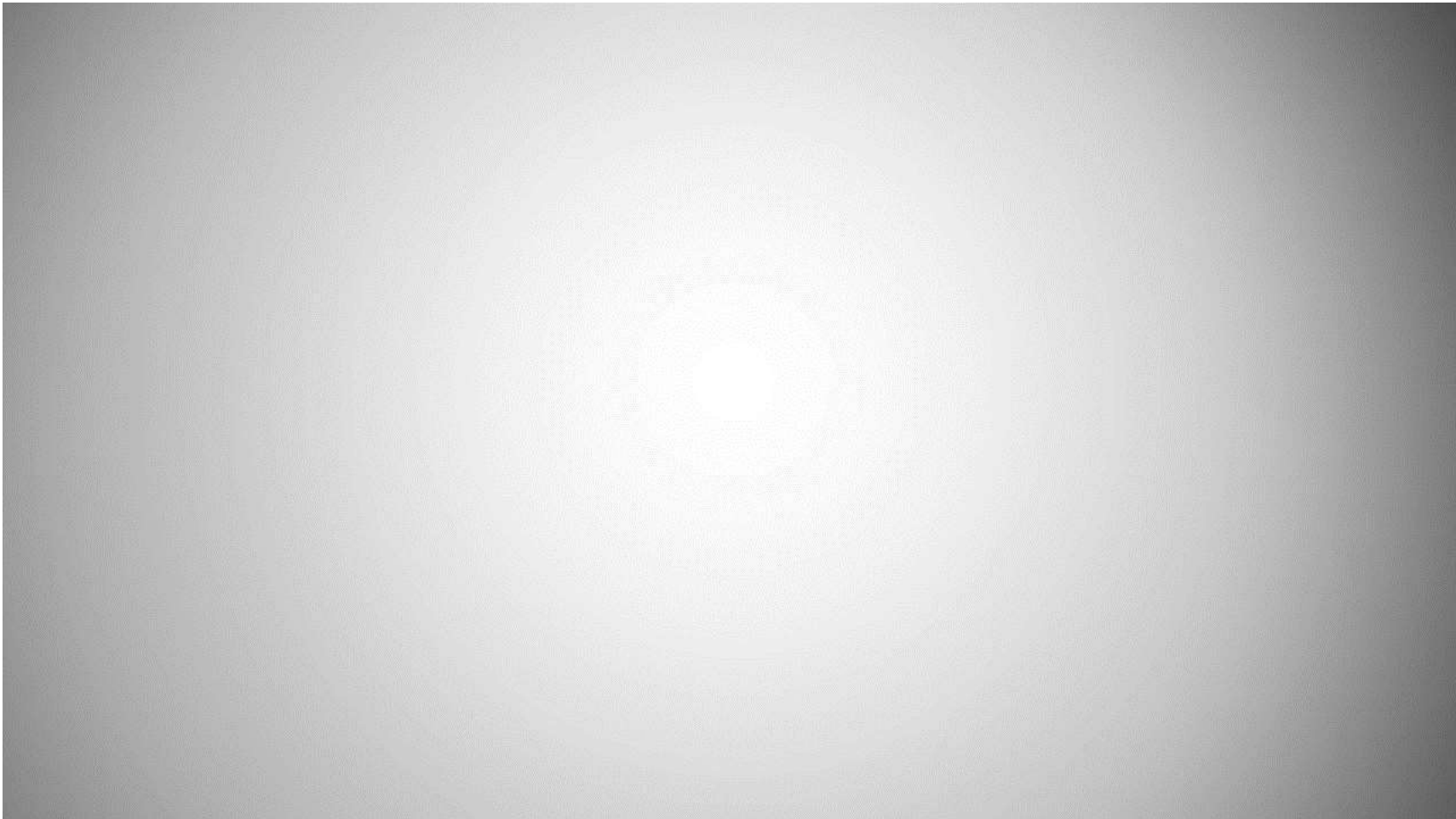
- Cellular or AMR

Control

- Web Enabled Device



How It Works – Modular Remote Shutoff





Integrated Remote Shutoff

Meter Technology

- Electromagnetic (Mag)
- Ball Valve

Meter Lay Length

- 7.5" – 5/8" and 5/8" x 3/4"
- 9" – 3/4"
- 10³/₄" – 1"

Communication

- AMR or AMI

Control

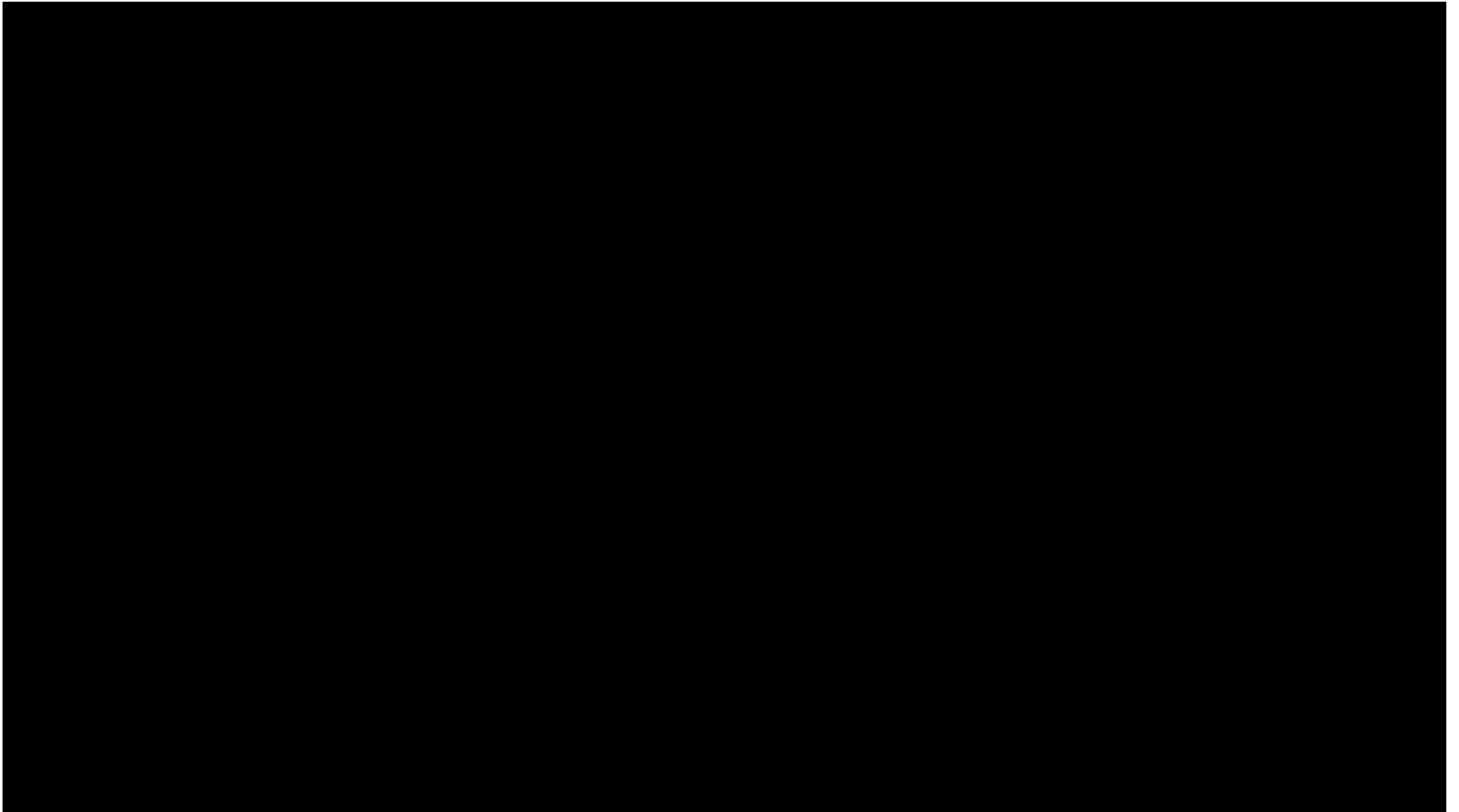
- Web Enabled Device

Sensus ally Water Meter





How It Works – Integrated Remote Shutoff





Considerations

- Relatively Expensive
- Meter Technology & Sizes
- Valve Type
 - Technology
 - Open/Close/Partial
- Communication Options
 - AMR/AMI, Cellular, Bluetooth
 - Reading Equipment Required
 - Back-Up/Indication Lights
 - Systematic or Targeted Deployment
 - Call In Schedule
 - Batch Processing
- Warranty
 - Battery
 - Accuracy
 - # of Actuations
- Head Loss
- Additional Features
 - Modularity
 - Temperature/Pressure Sensors
 - Alerts
 - Data Logging
- **Trust in Vendor/Pilot**



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