



Smart Actuation

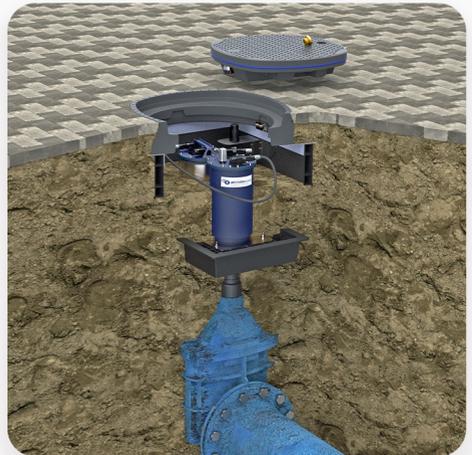
# 3S Remote Battery Powered Actuator

Improving response time.

Optimising network operations

Installing the 3S battery powered actuators onto your network allows you to operate valves at the touch of a button from a control center, drastically improving response time. The actuators can be controlled via SCADA or cloud portal for near instant operation.

This saves time, reduces operational costs and carbon while allowing staff more time to concentrate on other duties.



**Yorkshire Water's UK case study from 2020 demonstrates the product has a payback time of "less than 6 months"**



# How could this benefit my water company?

- ✓ Easy valve operation at the push of a button
  - ✓ Retrofits to existing valves with no need for chambers, telemetry cabling or on-site power
  - ✓ Cost effective network automation – Low cost per valve operation.
  - ✓ 80% project cost savings compared to traditional network automation methods
  - ✓ Huge savings in operating expenses and carbon output
  - ✓ Control valves directly via SCADA, bespoke control platform or web control portal
  - ✓ Very small Installed footprint – Fully buried solution
  - ✓ Completely off grid installation
  - ✓ Installs in a few hours
  - ✓ Long life rechargeable batteries – Up to 2 years for average use valves
  - ✓ SIM controlled – No need for additional in-field communication infrastructure
  - ✓ Operate valves to set percentages of open/closed
  - ✓ Calm networks operating profile built in – Avoiding transients and water hammer
  - ✓ Allows operatives to concentrate on critical work rather than manual tasks
  - ✓ Fully submersible – IP68 rated actuator and battery
  - ✓ ATEX 2 rating for gas and waste water networks
  - ✓ Extended product warranty available for up to 20 years operating life
  - ✓ Large diameter valves = no problem
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Traditional methods of actuating valves in networks involve building large chambers, grid connections for power and telemetry, PLC's and switching cabinets and installing new valves. The 3S actuator runs completely off grid, is retrofittable to existing assets and has a much smaller installed footprint meaning cost reductions of over 80% compared to the costs of traditional actuation methods.

The actuators can be retrofitted to most existing valves and provides torque of up to 550Nm (404Ft/LB). Larger actuators are available up to 1450Nm (1070Ft/LB)

## Think Smart – Embrace the future of off grid network automation.

### Product applications

- Resilience and Rezoning projects
- Emergency/Disaster planning – Water storage and redeployment
- Burst mitigation – Instant valve control – Risk reduction
- Operational cost and carbon impact reduction
- Critical valve automation – Valves near critical infrastructure
- Water conservation – Fast control and isolation of bursts
- Water tower and reservoir top inlet and outlet control
- Water quality improvement – Installed on DMA bordering valves
- Active DMA boundary valves – Active/Agile DMA's
- Automated leakage localisation