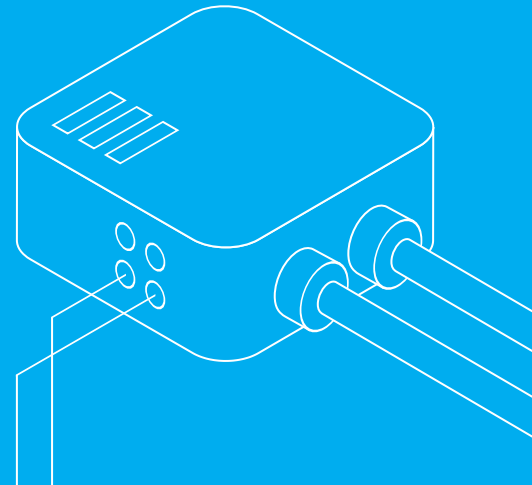


A smart way to manage your energy network

Our SmartValve is a secure valve control unit that provides energy service providers the ability to remotely manage and instantly control the supply of energy to their customers.



Introducing the cThings® SmartValve Battery

Our SmartValve Battery remotely monitors and controls the supply of energy to properties. This way energy providers can avoid the risk of accidental or deliberate non-payment of bills through smart billing and energy wastage through the supply to non-occupied properties.

The unit uses the latest LoRaWAN technology, providing high-grade security, up to 10 km, line-of-sight range and deep in-building penetration. An ideal solution for high and low density urban living. All this gives the energy service provider peace of mind.

The unit features an internal tamper alarm and can be used alongside data from energy meters to highlight potential energy fraud and supply issues.

Through our bespoke cThings Cloud API the unit can be controlled and monitored, by the supplier, from anywhere in the world.

FEATURES

- Remote valve control
- Long-range (deep in-building penetration)
- End-to-end security
- Bi-directional communication
- Automatic tamper detection
- Configurable low power fail-safe
- cThings Cloud API access

BENEFITS

- Remote shutdown of unoccupied residences to reduce avoidable costs
- Fraud prevention system
- Removes the need to send engineers to manually operate valves
- Real-time alarming
- Simple out of the box installation

SmartValve Battery Specifications

SmartValve

PRODUCT CODE

SmartValve Battery	2001000
SmartValve Battery with Integrated Connector	2001001

COMMUNICATIONS

Protocol	LoRaWAN 1.0.3 Compliant
Frequency	EU863-870
Transmit Power	14 dBm
LoRaWAN Features	Class A, OTAA, ADR

POWER

Battery Type	Alkaline
Max. Voltage	3.6V

OUTPUT*

Output Voltage	5V
Max. Power	5W

MECHANICAL

Dimensions (W x H x D)	152 x 100 x 53 mm (excluding gland)
Protection Class	IP54

ENVIRONMENTAL

Operating Temperature	0°C to 45°C
Storage Temperature	0°C to 45°C
Usage Environment	Indoors only
Relative Humidity	30% to 80% RH non-condensing

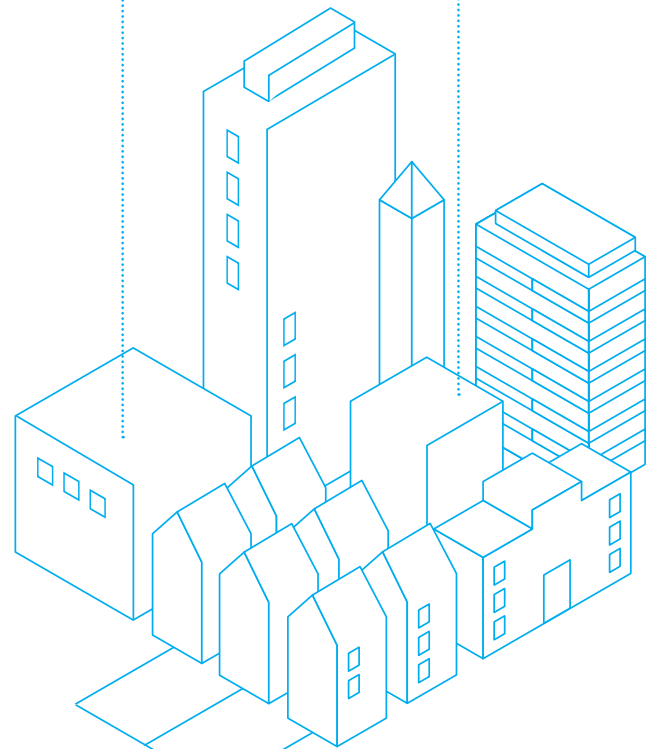
* Operation and performance will vary dependant on valve manufacturer/type and cannot be guaranteed

CERTIFICATIONS

Safety Compliance	EN 61010-1
EMC Compliance	EN 60730-1, EN 55032 & EN 55014-1 Residential

i IMPORTANT

- For optimal performance of the SmartValve Battery and connected valves, regular maintenance, servicing and active network management must be undertaken



Contents herein do not constitute a warranty and are for reference

Battery Pack Specifications

SmartValve

STANDARD*

Product Code	2001050
Battery Type	Alkaline
Capacity	15,000 mAh (approx.)
Max Voltage	3.2V
Operating Temperature	-18°C to 50°C
Storage Temperature	5°C to 30°C
Storage Environment	Store in a cool dry place

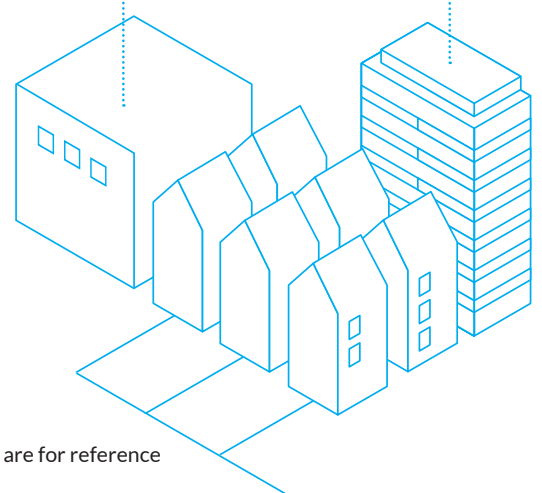
* All measurements made at temperature of 20±2°C and humidity of 55±20% RH

i SAFETY

- Batteries are non-rechargeable and should be disposed off responsibly
- Do not open, puncture, drop, deform or tamper with cells or batteries
- Do not use in a completely sealed pressure container
- Batteries are a fire, explosion and severe burn hazard
- In the event of short circuit or over-heating, disconnect immediately, allow to cool and dispose off responsibly

i IMPORTANT

- The SmartValve Battery should be powered on within one year of storage to ensure optimum battery life
- Refer to the Example Battery SmartValve Calculations document for examples of how to estimate indicative battery life



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