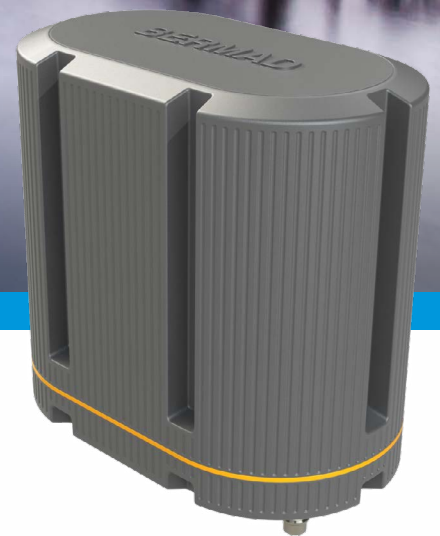


EPSILON

Product Page

Controller

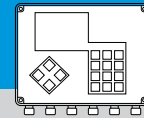


The **EPSILON-C** is advanced controller for pressure management, intermediate water supply and more. It allows monitoring and system analysis which is essential part of implementing digital twin approach, and thus achieving system optimization and improved efficiency. The end result is a reliable water supply and better service for the client.

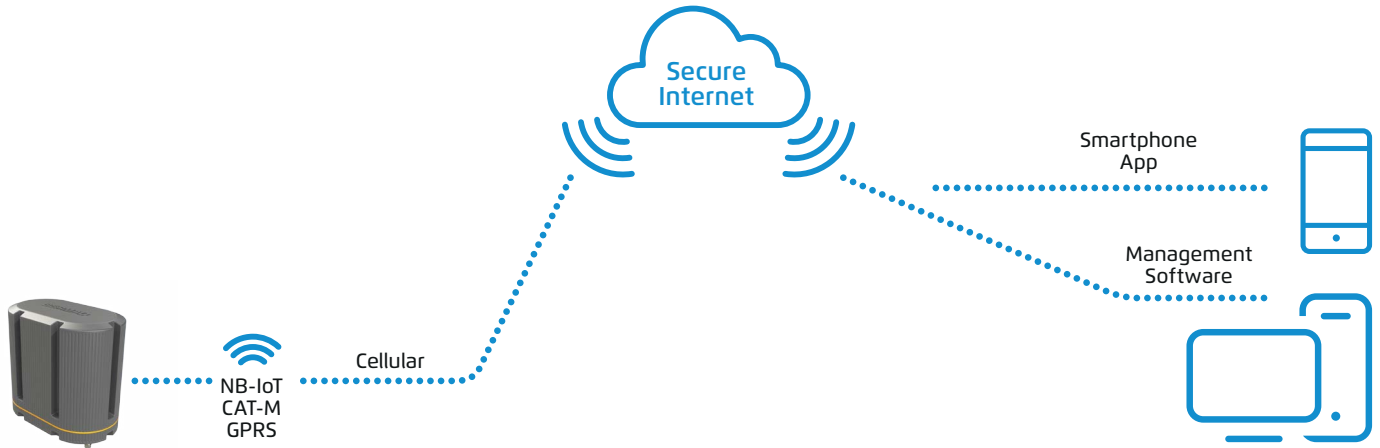
The **EPSILON-C** is a fully remote controlled battery operated controller. The **EPSILON-C** logs the data and uses cyber secured technology to transmit the data to a user-friendly cloud platform.

Water Control Solutions





REAL-TIME CONTROL ANYWHERE ANYTIME



Features and Benefits

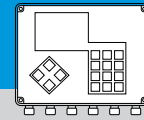
- 5 years internal battery operated or external power
- Large capacity data logging
- Full communication to Bermad cloud or to other platforms via API or FTP for monitoring and remote setting
- Intuitive and user friendly platform
- Advanced modern graphs and reports
- Alert and notifications via Mail
- Build-in 2 internal pressure sensors with accuracy of +/-0.5%

Applications

- **2 pressure regimes** by switching between “Low” to “High” set points according to flow rate or time windows (Day/Night)
- **Monitoring and data logger** using both digital and analog inputs:
 - Pressure sensors:
 - a. In critical points of the DMA for pressure management
 - b. For valves’ operation and performance monitoring
 - Water meters for counting flow rate, accumulated volume and make easier water balance calculation

BERMAD EPSILON Series

MODEL	Inputs	Outputs	Internal pressure sensors	Communication	
	Digital	Digital		Cellular	Bluetooth
E4	1	2	✓	✓	✓



Technical Specifications

Main features:

- Local Inputs & Outputs:
 - 1 digital input for metering and discrete sensors
 - 2 Latch outputs (16V DC; 100 mS pulse) for Day/Night control or fully open the valve by venting the valve chamber.
- Sensors calibration for all physical units
- Internal
 - 2 accurate internal pressure sensors +/- 0.5%

Connectivity:

- Built in 4G Modem with 2G fallback
 - Global data sim card for worldwide plug-and-play internet connectivity
 - Supports GPRS, 4G communication
- Bluetooth communication for technician mode tasks

Operation modes:

- Online mode: 24/7 connection between controller and cloud (require external power source)
- Offline mode:
 - Autonomous control operation, predefined cloud communication and real time alerts
 - Designed for power saving when using internal battery

Power source:

- Lithium battery for operation in offline mode
- 9-16VDC external power input for online mode operation (solar panel, grid power, etc.)

Integral data logger with more than 150K records, enables comprehensive log registry that can cover long periods of offline operation

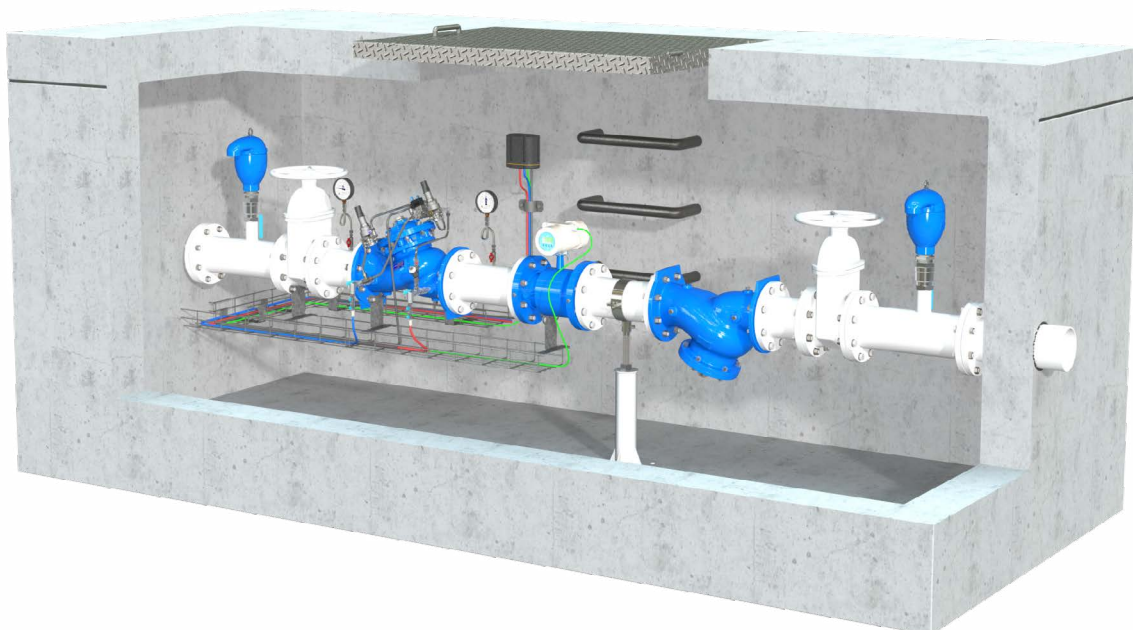
Periodic over the air firmware upgrades (FOTA)

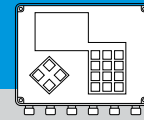
Outdoor installation: IP68 rated with UV protection

Standard compliance: CE & FCC

Industrial grade electronic components: -35°C to 75°C

Push type connectors for quick and easy wiring without need for special tools





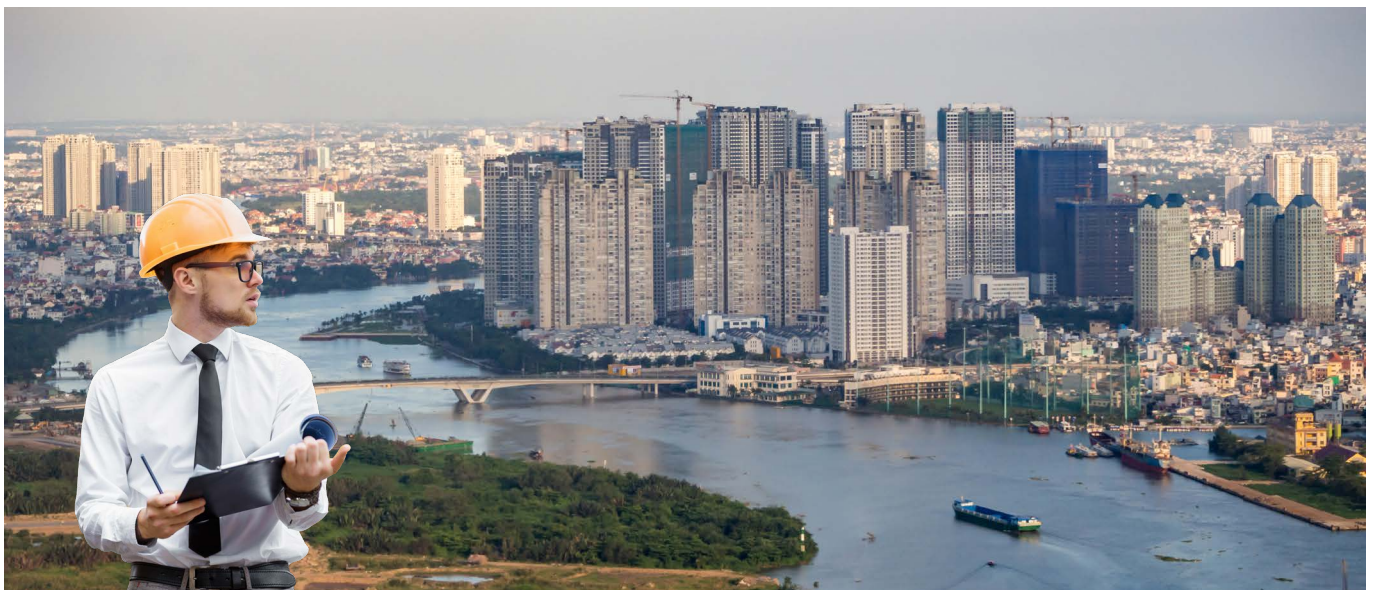
BERMAD Cloud

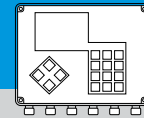
BERMAD Cloud offers web-based internet access to your control & monitoring management system:

- Global management of all your EPSILON controllers
- User friendly and intuitive control features
- Real time status and monitoring

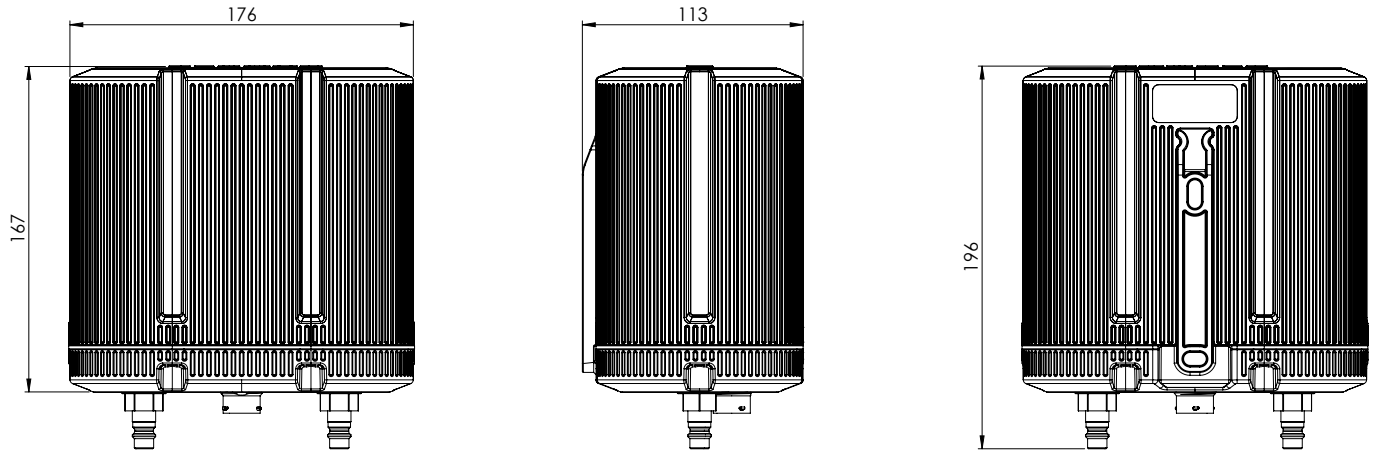
BERMAD Cloud Features:

- **Cyber protected login:**
 - Multi-user connectivity for enhanced management and technical support
 - Individual access level authorization (Edit settings, Read only)
- **Global Account management:**
 - Language and time zone selection
 - User privileges
 - Unit selection (Metric, Imperial)
- **Dynamic dashboard:**
 - Geo-referenced map with global view of your monitor and control management project
 - Current status of EPSILON controllers
 - Up-to-date sensors data
 - Quick access to the EPSILON management tools
 - Setup and programming
 - Wizard for guided unit config
- **Alert control:**
 - Alert status log and Mail notification
 - Alert management tools:
 - Thresholds of several levels for each of the measured values
 - Alert notifications per user level of authorization and position
- **Log information:**
 - System state, operation events & alerts
 - Periodic sensor data acquisition
 - Watermeter flow & accumulations
 - Pressures
 - Analogue sensor data
 - Battery voltage level
- **Report generator:**
 - Personalized reports for operation and traceability
 - Export to Excel file



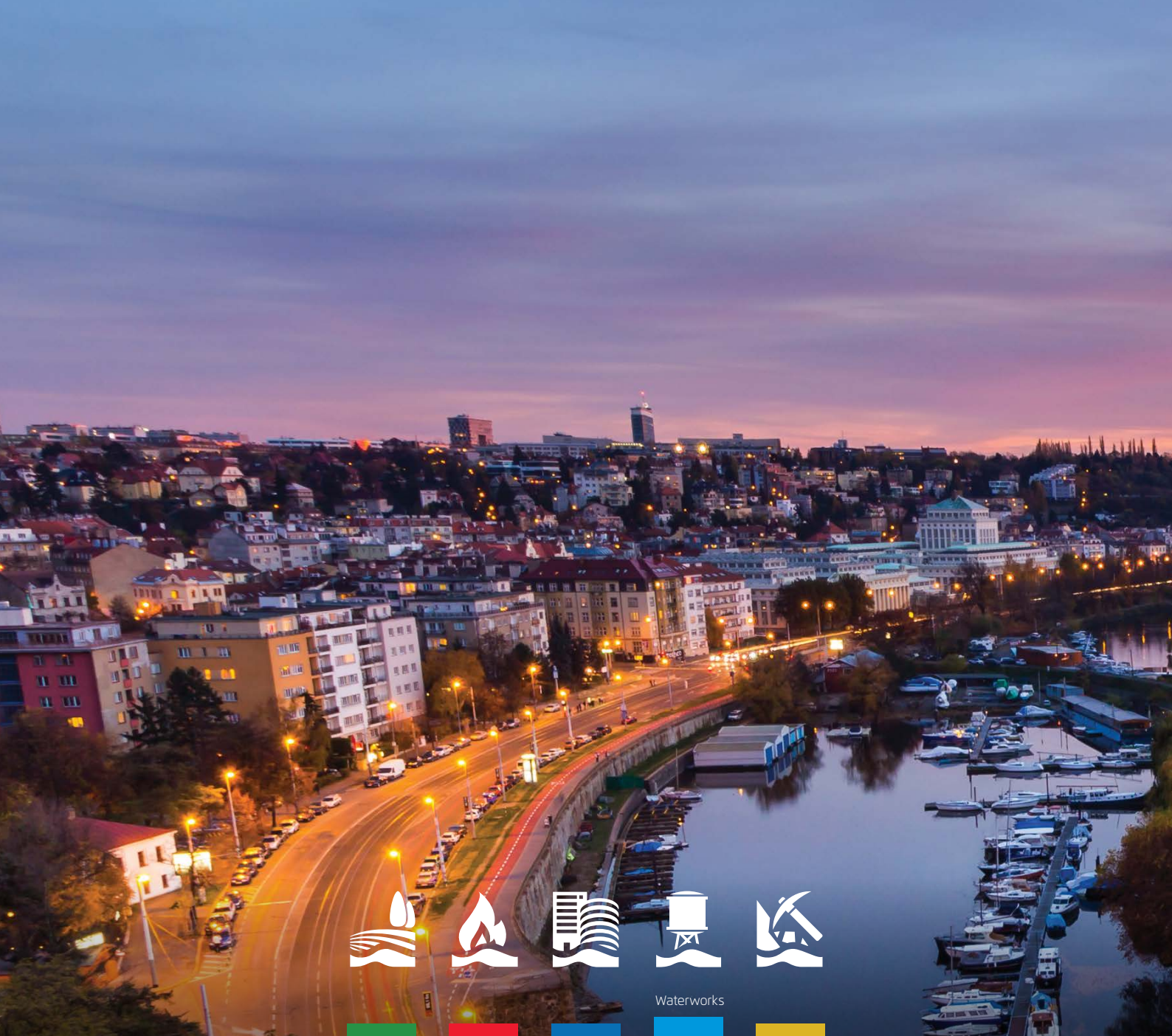


Dimensions



Dynamic dashboard





Waterworks

