

## BERMAD Cloud based irrigation control Solution

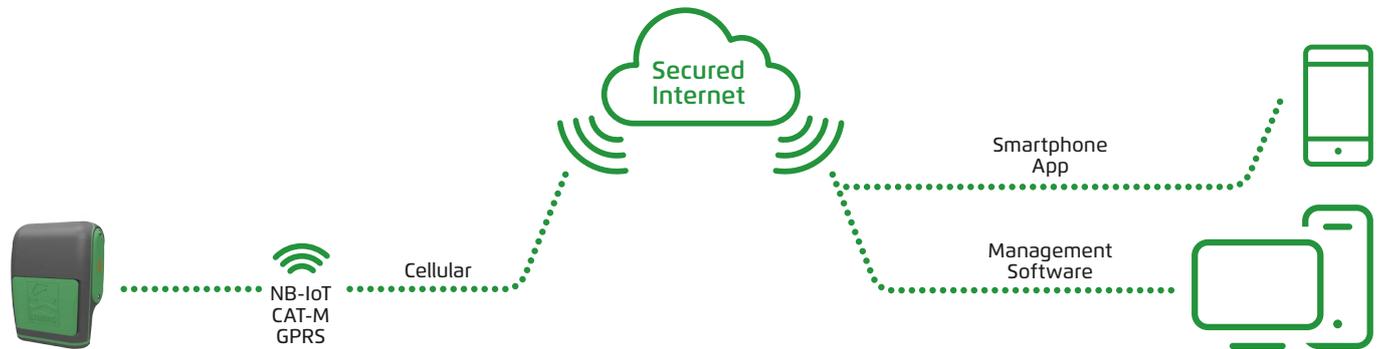


**Omega** is BERMAD's advanced cloud-based irrigation controller, offering anywhere-anytime connectivity to your irrigation system using **BERMAD Cloud** Web access and Smartphone App.

**Omega** is a standalone battery-operated controller, designed specifically to provide user-friendly and cost effective solution for irrigation systems, water distribution, data acquisition and pre-paid systems (districts & consortiums)



# CONTROL AT THE PALM OF YOUR HAND



## Features and Benefits

### Omega Controller

- Cellular Connectivity
- Time based and Volumetric control
- Modular solution

### BERMAD Cloud & Smartphone App

- Intuitive, functional & simple to operate
- Secured end-to-end communication.
- Real-Time alert notification
- Easy setup configuration
- Irrigation programing and manual operation

## Typical Application

- Professional Volumetric and Time Based irrigation control
- Open fields, orchards, vineyards, mesh houses, greenhouses and landscape
- Auxiliary control of remote areas, beyond reach of main farm control systems
- Water distribution, Pre-paid and Data acquisition systems for Districts & Consortiums

### BERMAD OMEGA Series

MODEL	LOCAL I/O			Communication			IMAGE
	Outputs	Inputs		Modbus	Cellular	Bluetooth	
	Latch	Digital	Analog				
OMEGA	5	4	2	x	Setup & Operation	Technician Mode	
OMEGA RS	4	4	2	✓			
OMEGA M	9	8	2	✓	Setup & Operation	Technician Mode	
OMEGA L	13	4	2	✓			





## Controller Features

### Volumetric and Time based Irrigation:

- 16 programs with up-to 16 sequential valve operations each
  - Weekly or Cyclic irrigation scheduling
  - 4 programmable start times or cyclic irrigation windows
  - Widespread valve run time range: 10 seconds – 4 days

### High & Low flow monitoring with leak and clog alert for all type of operation.

#### I/O properties (depending on model):

- Local I/O:
  - 4, 5, 9 or 13 Latch outputs (17V DC; 100 mS pulse) with master valve / pump control assignation
  - 4 or 8 digital inputs for water meter readings and discrete sensors
  - 2 analogue inputs for 4-20mA or 0-10VDC sensors

#### Connectivity:

- Built in 4G Modem with 2G fallback
  - Global Data sim card for worldwide plug-and-play internet connectivity
  - Supports NB-IoT, CAT-M & GPRS communication protocols
- 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 batteries.

### Power source:

- 4 LR14 (C Size) Alkaline batteries for operation in Offline mode
- 9-18VDC 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:** IP65 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

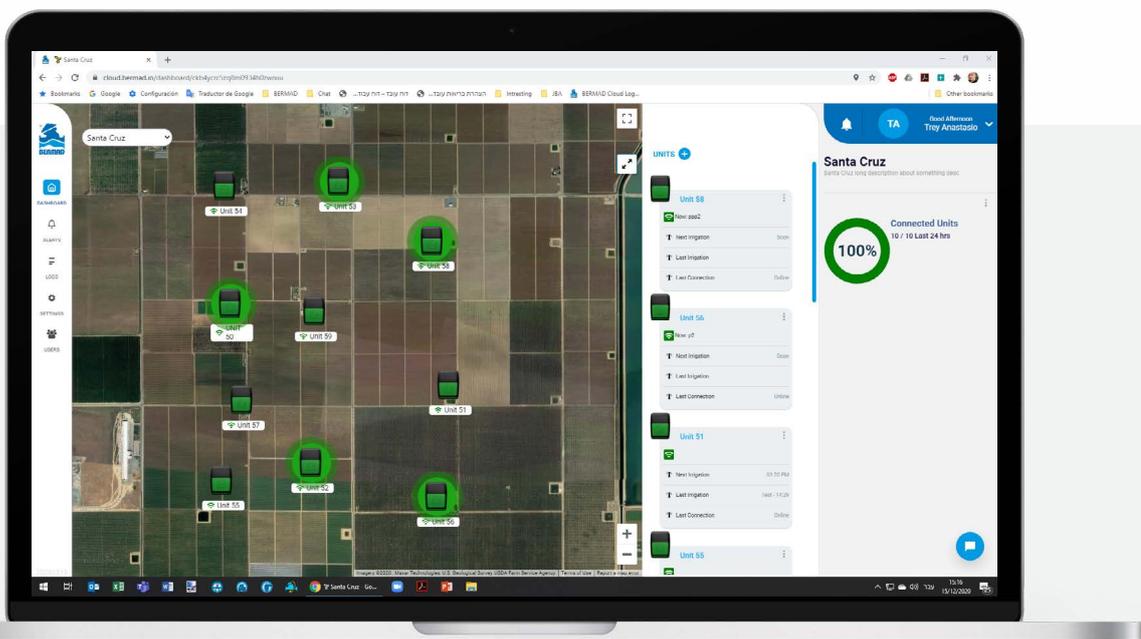
**BERMAD Cloud offers web-based internet access to your irrigation system:**

- User friendly and intuitive control features
- Global management of all your Omega controllers
- Real time status visual monitoring of your irrigation system
- Cloud level integration of third-party solutions

## BERMAD Cloud Features:

- **Password protected login:**
  - Multi-user connectivity for enhanced management and technical support
  - Individual access level authorization
- **Global Account management:**
  - Language and time zone selection
  - User privileges
  - Unit support (Metric, Imperial)
- **Dynamic dashboard:**
  - Geo-referenced map with global view of your irrigation project
    - Current status of Omega controllers
    - Up-to-date water budget usage
  - Quick access to unit management tools
    - Unit Setup, programming and manual operation
    - Wizard for guided unit config & I/O definition
- **Alert control:**
  - Alert status log and email notification
  - Alert management tools:
    - Controller reaction to each type of alert
    - Alert notification settings per user
- **Log information:**
  - System state, operation events & alerts
  - Periodic sensor data acquisition
    - Watermeter accumulations
    - Analogue sensor data
    - Battery charge
- **Report generator:**
  - Personalized reports for operation and traceability
  - Export to Excel and PDF
- **Smartphone App:**
  - Unit setup and configuration
  - Irrigation programming and manual operation

Dynamic dashboard



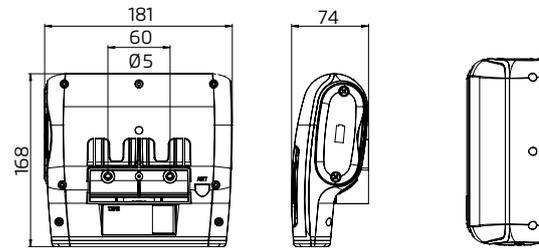
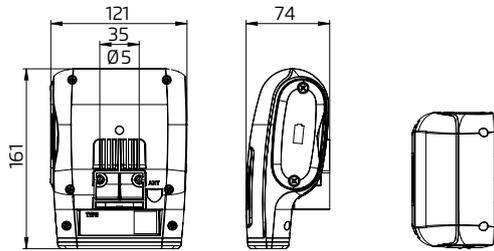


# Dimensions

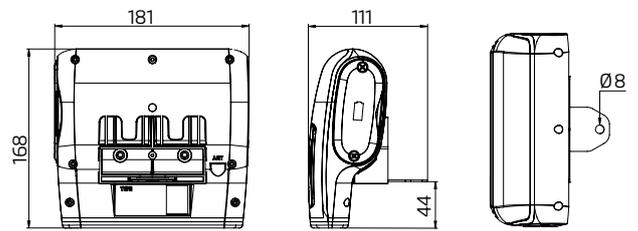
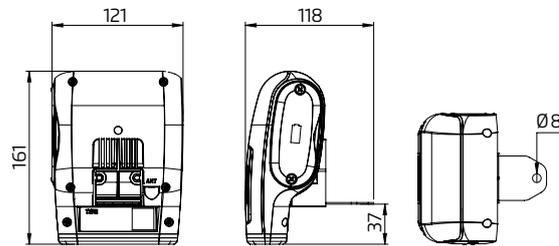
**Omega, Omega RS**

**Omega M, Omega L**

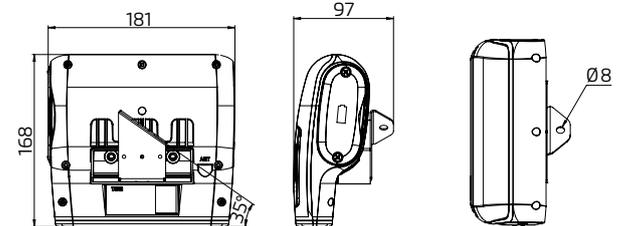
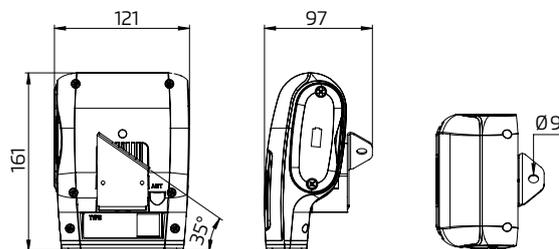
Wall mounted



Globe Valve Adaptor



Oblique Valve Adaptor\*



# Packing Specifications



Omega Series		
	Omega Omega RS	Omega M Omega L
No. of Units	1	1
Length [cm]	25	27.5
Width [cm]	21	22.5
Height [cm]	8	9
Gross Weight (Kg)	1.23	1.45

\* Not included in Omega Kit. Please consult BERMAD personnel for further information



Irrigation

