

# BERMAD Cloud based irrigation control Solution



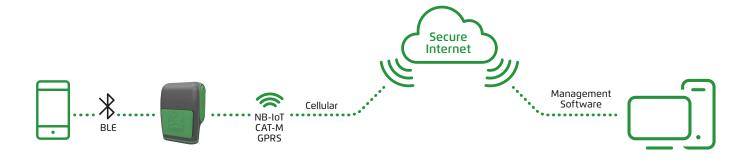
offering anywhere-anytime connectivity to your irrigation system using **BERMAD Cloud** as well as Smartphone App for local operation

**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**

- Intuitive, functional & simple to operate
- Secured end-to-end communication.
- Real-Time alert notification

## Smartphone App

- 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**

	LOCAL I/O			Communication	
MODEL	Out. In.		n.	Collular	Dluotooth
	Latch	Dig.	Ana.	Cellular	Bluetooth
Omega 110	1	1	0	✓	✓
Omega 220	2	2	0	✓	✓
Omega 542	5	4	2	✓	✓





## Controller Features

## Volumetric and Time based Irrigation:

- 8 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:
  - 1-5 Latch outputs (16V DC; 25 mS pulse) with master valve / pump control assignation
  - 1-4 digital inputs for water meter readings and discrete sensors
  - 0-2 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
- BLE (Bluetooth) communication for local connection to your Smartphone

## 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 up to 5 years operation in Offline mode
- 9-24VDC 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
  - individual alert notification settings per user

## Log information:

- System state, operation events & alerts
- Periodic sensor data acquisition
  - Watermeter accumulations
  - Analogue sensor data
  - Battery charge

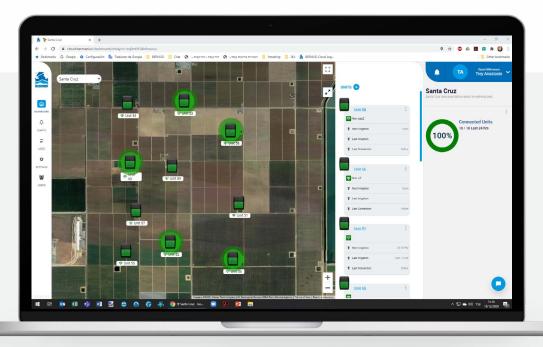
## Report generator:

- Personalized reports for operation and traceability
- Export to Excel and PDF

## Smartphone App for local communication with Omega controller:

- Unit setup and configuration
- Irrigation programing and manual operation

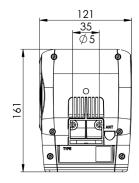
# Dynamic dashboard





# **Dimensions**

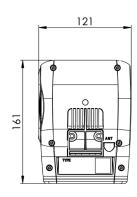
## Wall mounted

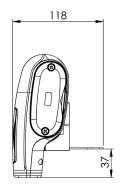


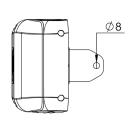




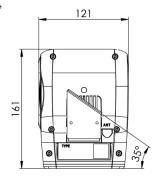
## **Globe Valve Adaptor**

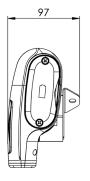


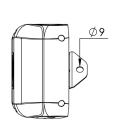




## Oblique Valve Adaptor\*







# **Packing Specifications**



Omega Series				
No. of Units	1			
Length [cm]	25			
Width [cm]	21			
Height [cm]	8			
Gross Weight (Kg)	1.23			

<sup>\*</sup> Not included in Omega Kit. Please consult BERMAD personel for further information



