

BERMAD Cloud based irrigation control Solution



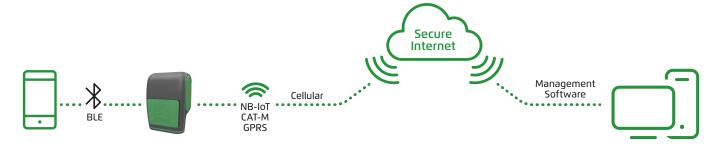
Omega is BERMAD's advanced cloud-based irrigation controller, offering anywhere-anytime connectivity to your irrigation system using **BERMAD Cloud** as well as Smartphone App for local operation

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

MODEL	LOCAL I/O			Communication	
	Out.	ln.		Callulas	Dhuataath
	Latch	Dig.	Ana.	Cellular Bluetooth	Bineroorii
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: -31°F to 167°F

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

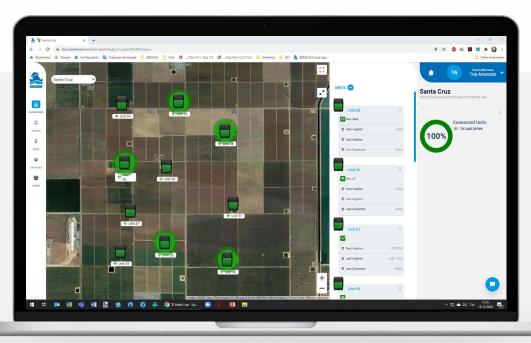
Report generator:

- 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

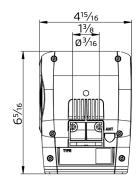
Dynamic dashboard





Dimensions

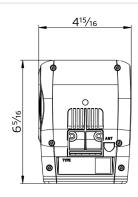
Wall mounted

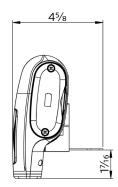


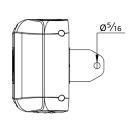




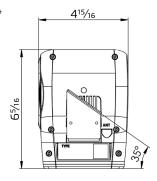
Globe Valve Adaptor







Oblique Valve Adaptor*







Packing Specifications



Omega Series				
No. of Units	1			
Length [Inch]	93/16			
Width [Inch]	81/4			
Height [Inch]	31/8			
Gross Weight (Libra)	3.81			

^{*} Not included in Omega Kit. Please consult BERMAD personel for further information



