

BERMAD Cloud based irrigation control Solution



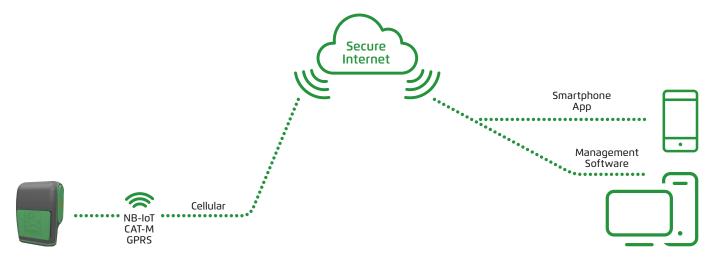
system using **BERMAD Cloud** Web access and Smartphone App.

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

	LOCAL I/O			Communication		
MODEL	Outputs	Inputs		Modbus	Collular	Dhuataath
	Latch	Digital	Analog	MOODUS	Cellular	Bluetooth
OMEGA	5	4	2	x	Setup & Operation	Technician Mode
OMEGA RS	4	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; 100 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
- 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
- 9-24VDC 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
 - Alert notification settings per user

Log information:

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

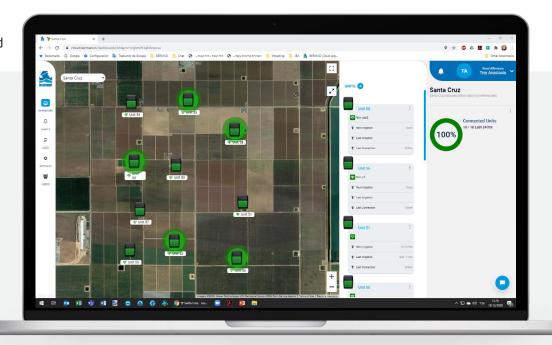
Report generator:

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

Smartphone App:

- Unit setup and configuration
- Irrigation programing and manual operation

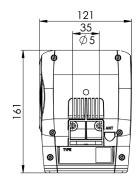
Dynamic dashboard





Dimensions

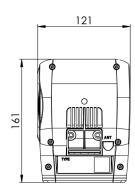
Wall mounted

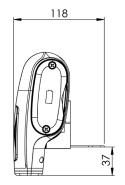


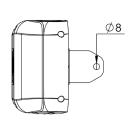




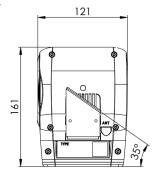
Globe Valve Adaptor

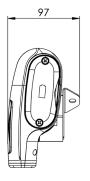






Oblique Valve Adaptor*







Packing Specifications



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

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



