

# IRRIGATION CONTROLLER

## Model Omega R

Omega R is part of BERMAD's advanced cloud-based irrigation controllers' series.

Omega R is a standalone battery-operated controller, designed specifically to provide user-friendly and cost-effective solution for small farms for irrigation scheduling, water meters reading and monitoring of various parameters.

Omega R offers an online remote access to your field through BERMAD Cloud Web access and Smartphone App.





- [1] BERMAD Model OMEGA R Smart Irrigation Controller
- [2] Combination Air Valve Model C30
- [3] Hydrometer Model IR-900-M0-Magnetic Drive
- [4] Pressure Reducing Valve Model IR-120-50-XZ
- [5] Combination Air Valve Model C10

## Features & Benefits

- Advanced Irrigation Controller
  - DC latch valve operation. Batteries or solar panel charged.
  - Quick and simple installation and configuration.
  - Fertigation by volume, irrigation by triggers.
- Advanced Cloud Application
  - Remote and real-time irrigation operation.
  - Secured end-to-end cellular communication.
  - Real-Time alert notification high & low flow, leak, and clog alert.
  - Intuitive user experience
- Integrated Solution
  - A full hydrant including the valve, water meter, solenoid and control.

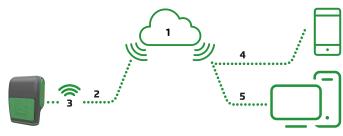
## Typical Applications

- Professional volumetric and time based irrigation control.
- Open fields, orchards, vineyards, greenhouses and landscape.
- Dedicated tasks like tank level control, dosing unit operation, remote monitoring.
- Water supply management systems for water districts and irrigation consortiums.

### Operation Modes:

- General operation concept
  - The Omega controller is connected through cellular to Bermad cloud
  - Real time mode the Omega communicate with the cloud consecutively
  - Power saving mode the Omega synchronizes with the cloud according to a pre-defined schedule.\*
- Built in 4G Modem with 2G fallback Supports NB-IoT, CAT-M & GPRS communication protocols
  - Global Data sim card for worldwide plug-and-play internet connectivity
  - BLE access for a technician mode

\*All irrigation schedule, reports and alarms are autonomously operated regardless cloud communication



Num	Description
1	Secured Internet
2	Cellular
3	NB-IoT, CAT-M, GPRS
4	Smartphone App
5	Management Software



## **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

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

#### 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.)

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

## **BERMAD Cloud Features**

#### Password protected login:

- 2 factor authenticator login
- Protected multi-user access
- Different access level authorization

#### Global Account management:

- Language and time zone selection
- Unit support (Metric, Imperial)

#### Dynamic dashboard:

- Geo-referenced map with site and device view
- Real time status of Omega controllers
- Up-to-date water budget usage
- Intuitive unit management tools
- Setup, configuration and programming through wizards
- Manual operation

#### Alert control:

- Alert status log and email notification
- Controller reaction to each type of alert

#### Log information:

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

#### Report generator:

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

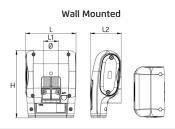
#### Smartphone App:

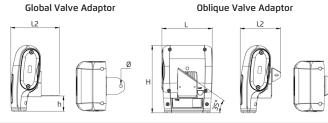
- Unit setup and configuration
- Irrigation programing and manual operation

## **Technical Data**

## **Technical Specifications**

For other Adaptors, Please refer to <a href="MERMAD">BERMAD</a> full engineering page.





Model	Adaptor	Weight (Kg)	L (mm)	L1 (mm)	L2 (mm)	H (mm)	h (mm)	Ø (mm)	Local I/O			Cellular	Bluetooth
									Latch Outputs	Digital Inputs	Analog Inputs	Central	Bidetootii
Omega R	Wall monuted	1.23	121	35	74	161	-	5	4	4	2	Setup & Operation	Technician Mode
Omega R	Globe	1.23	121	-	118	161	37	8	4	4	2	Setup & Operation	Technician Mode
Omega R	Oblique	1.23	121	-	97	161	-	8	4	4	2	Setup & Operation	Technician Mode

