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.
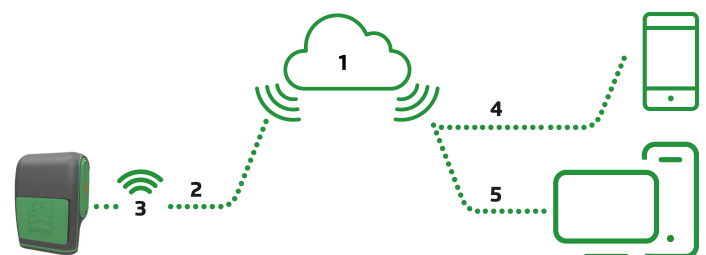
Typical Applications

- 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

All images in this catalog are for illustration only

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
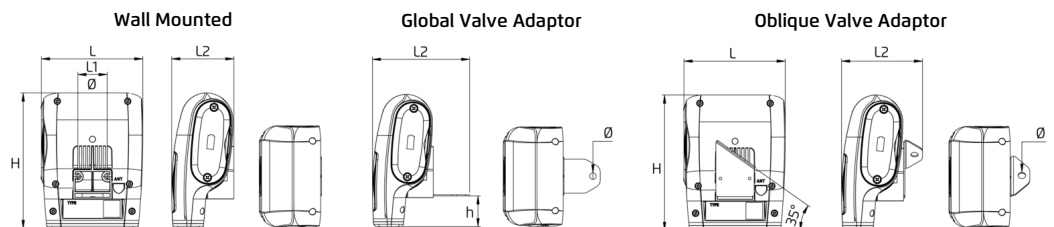
BERMAD Cloud Features

- **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 [BERMAD](#) full engineering page.

Wall Mounted · Global Valve Adaptor · Oblique Valve Adaptor

Model	Adaptor	Weight (Kg)	L (mm)	L1 (mm)	L2 (mm)	H (mm)	h (mm)	Ø (mm)	I/O Outputs Latch	I/O Inputs Digital	I/O Inputs Analog	Cellular	Bluetooth
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

*Adaptors are available for Globe and Oblique valves