



IRRIGATION CONTROLLER

Model Omega S

Omega S is part of BERMAD's advanced cloudbased irrigation controllers series. Omega S 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 S offers an online remote access to your field through BERMAD Cloud Web access and Smartphone App.





- [1] BERMAD Model OMEGA S 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.

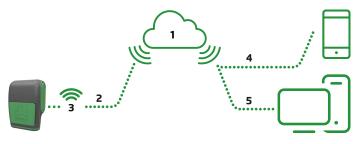
Typical Applications

- 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

Omega S

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 <u>BERMAD</u> full engineering page.



Model	Adaptor	Weight (Kg)	L (mm)	L1 (mm)	L2 (mm)	H (mm)	h (mm)	Ø (mm)	Local I/O			Cellular	Bluetooth
Model									Latch Outputs	Digital Inputs	Analog Inputs	Central	Bidetootii
Omega S	Wall monuted	1.23	121	35	74	161	-	5	5	4	2	Setup & Operation	Technician Mode
Omega S	Globe	1.23	121	-	118	161	37	8	5	4	2	Setup & Operation	Technician Mode
Omega S	Oblique	1.23	121	-	97	161	-	9	5	4	2	Setup & Operation	Technician Mode

^{*}Adaptors are available for Globe and Oblique valves

