

# Standalone Cloud Enabled Irrigation Control System

## BIC 550

BERMAD BIC-550 is a standalone irrigation controller with optional Cloud and radio communication. It allows the user to monitor and control the irrigation system by using either the controller's keyboard and display, or remotely, by using mobile device or computer via the Cloud. BIC-550's results are increased yields, produce quality, and profitability.

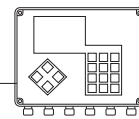


### Features and Benefits

- **Modular hardware features** - Versatile and flexible adaptation to the farmer's needs
- **Versatile irrigation control features**
  - Up to 16 irrigation valves
  - Time or volume irrigation, single valve or groups
  - Variety of scheduling methods
  - Main valve operation control
- **Built-in fertilizer injection control** – Efficient chemicals implementation for increased yields, and profitability
- **Filtration control** – water quality to protect the irrigation system and water conservation
- **Interface**
  - Local LCD display with five button keyboard
  - User-friendly web-site for real-time remote monitoring & operation of multiple controllers
- **Alarms**
  - Local and e-mail via the Cloud
  - Water flow-rate, leakage, and pressure control
  - Fertilizer leakage and no flow control
  - Filtration DP fault
  - Low battery

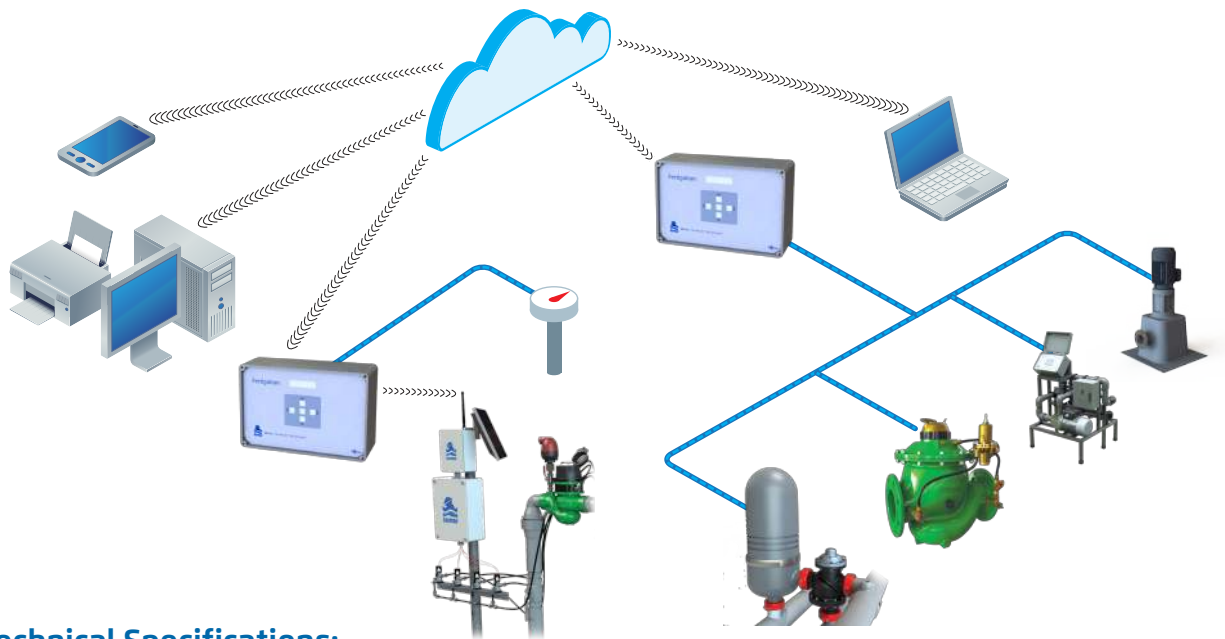
### Typical Application

- Professional time and volume based irrigation control of small to medium fields
- Crops in single open field, trees, mesh houses, and greenhouse
- Irrigation control of fields without electricity
- Irrigation control of up to 16 zones



### Communication and Connectivity:

- Connectivity with the field's control components
  - 4, 8, 12 or 16 12V DC latch or 24V AC outputs
  - User configurable main valve or pump, valves, pressure differential, and pressure switch
  - User configurable start/stop contact
  - Radio RTU - with two way communication
- Connectivity with the Cloud
  - GSM modem for most cellular networks, requires subscription with cellular provider
  - Radio RTU - License free 2-Way radio RTUs for remote valves and pump operation



### Technical Specifications:

- Construction Materials: UV Resistant ABS
- Temperatures:
  - Ambient: (-17) to 60°C; (-4) to 140°F
  - Storage: (-30) to 70°C; (-22) to 158°F
- Protection Rating: IP67; NEMA 4X
- Dimensions:
  - Length: 300mm; 11<sup>13</sup>/<sub>16</sub> inch
  - Height: 230mm; 9<sup>1</sup>/<sub>16</sub> inch
  - Width: 180mm; 7<sup>3</sup>/<sub>16</sub> inch
- Weight: 2.3 Kg; 6.1lbs.

### Configuration Options

Parameter	Type	Accessories	BIC 550	BIC 550 RF
Form of irrigation	Time		✓	✓
	Volume		✓	✓
	SMART Control	Sensor, Volume/Area	✓	✓
Type of outputs	DC Latch	Dry contact AC	✓	✓
Type of inputs	Local / Remote	Dry contact AC	✓	✓
		Analog	✓	✓
Power Source	12VDC	4XD type Battery, 7Ah rechargeable battery and 12V charger	✓	✓
	Solar + Battery	12VDC 7Ah rechargeable battery and 10W solar panel	✓	✓
Cloud Control			✓	✓
Communication	Cellular		✓	✓
Number of outputs			4 - 16	1 - 16
Number of digital inputs			4	4
Number of analog inputs			1	1

