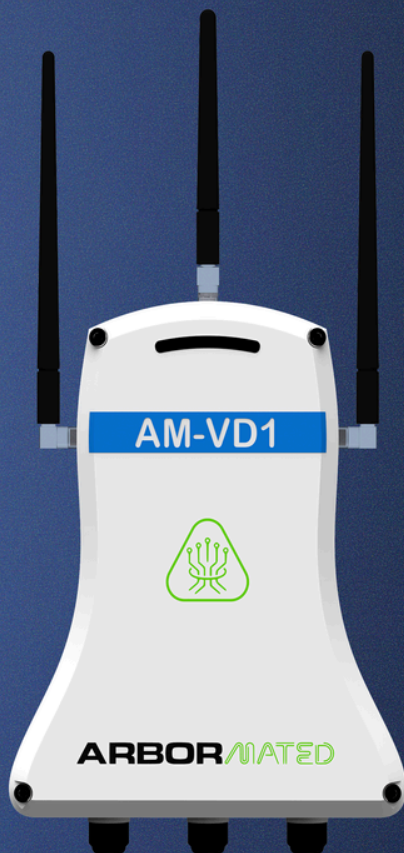


ArborValve DC



Onboard 12–24 VAC @ 1 A (battery-derived)



External AC switching · up to 250 VAC / 10 A



Dual AC valve channels



Long-range LPWAN field radio



Bluetooth setup & diagnostics



GNSS positioning



Modbus · SDI-12 · local sensing



Hybrid with ArborValve DC

Solar-powered DC valve controller that does more than open and close: dual-valve drive for latching and non-latching solenoids, sensing at the valve post, and long-range wireless reach up to about 2 km from the gateway — IP67 hardware for laterals that never get a trench.



More than on/off

Dual-valve architecture for DC latching and non-latching solenoids, with adjustable drive in the ~6.5–24 VDC class — so one node can automate a zone pair without a second radio at the post.

Sense where you actuate

Connect pressure switches, pulse meters, voltage and 4–20 mA transmitters, plus SDI-12 and Modbus instruments — with controlled 5 / 12 / 24 V sensor power — so every open/close has measurable context.

A wireless valve radio that only opens and closes a solenoid leaves growers guessing. ArborValve DC is a complete field actuator: it drives DC and DC-latching valves, reads pressure, flow and switch feedback at the valve post, speaks SDI-12 and Modbus to local instruments, and runs from a solar-charged LiFePO4 energy system — without trenching control wire across the block.

Specifications

General

Spec	Value
Product name	ArborValve DC
Product code	AM-VD1
Role	DC valve control node · field actuator + local sensing
Category	Farm Operations Platform
Enclosure	IP67
Suggested price	Inquire

Power & energy

Spec	Value
Solar input	12–24 V
Panel class	10–20 W
Charge management	MPPT-based
Battery	4S LiFePO4 · 6500 mAh
Deployment	Solar-first remote laterals

Valve control

Spec	Value
Valve type	DC latching and non-latching solenoids
Drive voltage	Adjustable · approx. 6.5–24 VDC
Architecture	Dual-valve (standard first SKU: 2-valve control)
Drive stages	Dual high-current H-bridge actuator channels
Feedback	Valve voltage sense · current monitoring paths