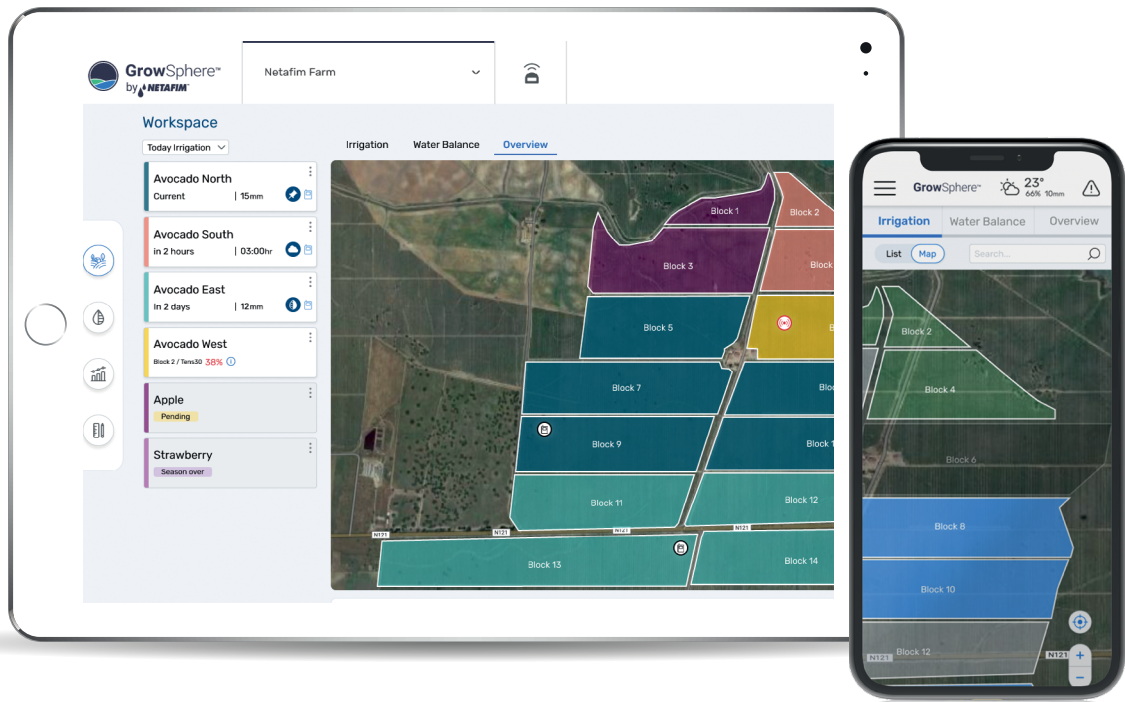




# GrowSphere™ Catalogue

V1.4 – July 2025, South Africa

# Knock off all your key irrigation & fertigation tasks **in one easy-to-use workspace**



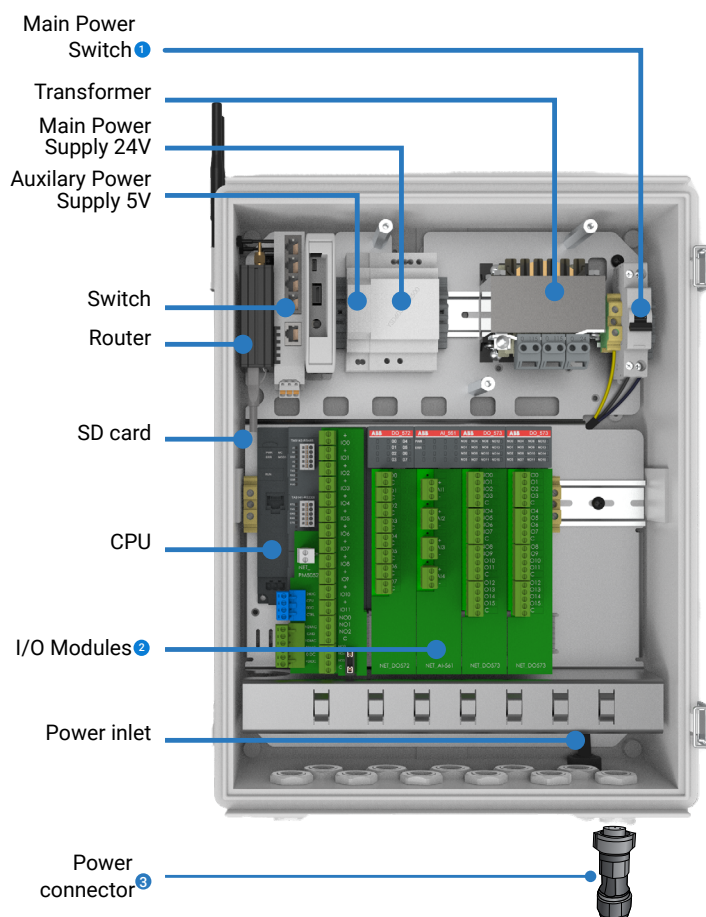
- ✓ Get a **real-time irrigation overview** of your entire farm by crop and plot
- ✓ Easily **edit, skip, stop** and **resume** irrigation programs and shifts
- ✓ **Alerts and notifications** about your irrigation execution
- ✓ **Monitor in-field irrigation status and crop stress** based on soil and weather sensors
- ✓ **Easily build and manage** your irrigation programme and schedule
- ✓ **Easily generate, edit and export historic data** to support traceability and track crop performance
- ✓ **Manage up to four irrigation mainlines** with one controller and access **all controllers on one platform**

# /GrowSphere™ MAX

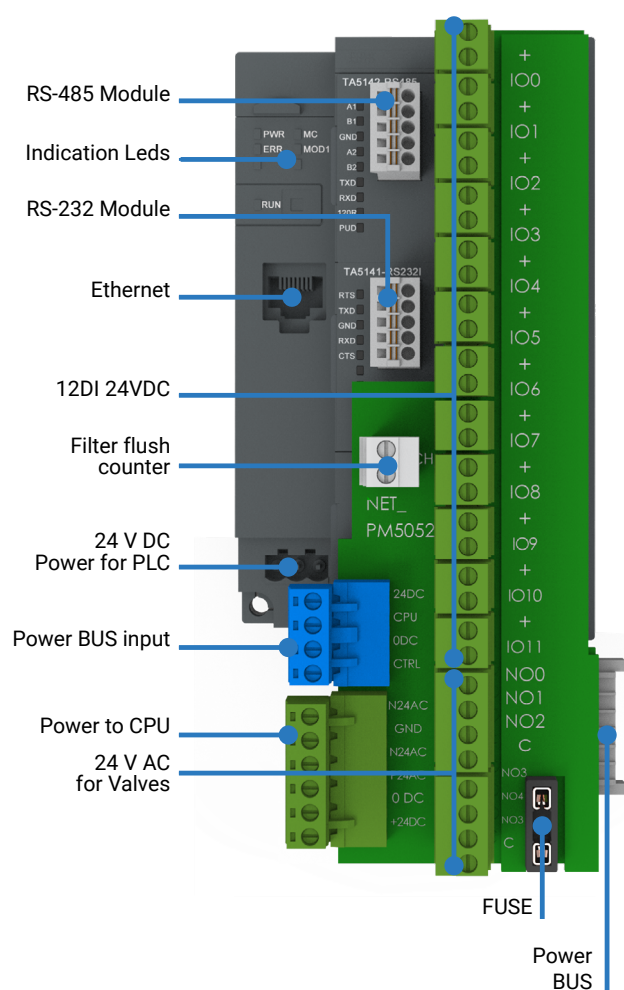
**GrowSphere™ MAX** is an intuitive and simple-to-use controller designed to help you grow more with less. **GrowSphere™ MAX** regulates water and fertilizer delivery in a precision irrigation system, activating local and remote devices such as pumps, valves, filters, dosing pumps, and other hydraulic components. This ensures crops receive the optimal amount of water and nutrients at all times.

## /Internal Design

### /GrowSphere™ MAX



### /CPU




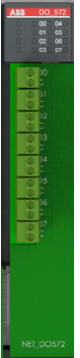
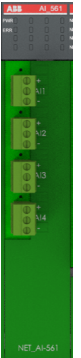

- ❶ Switches the main power on and off
- ❷ Enable connecting the peripheral components
- ❸ You can find the connector in the accessories box
- \* Subject to product configuration



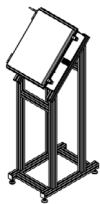

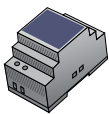



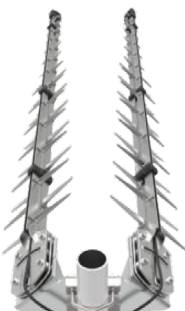
DESCRIPTION




GS-MAX Controller 220V-6DO-12DI  
GrowSphere™ MAX 220V, 6 Digital Outputs, and 12 Digital Inputs

/Expansion Modules

CATALOGUE NUMBER	DESCRIPTION	CATALOGUE NUMBER	DESCRIPTION
	<p><b>GS-MAX 16 RELAY WITH ADAPTOR</b></p> <ul style="list-style-type: none"><li>• 16 Outputs - Relay</li><li>• Shared Common</li><li>• Kickback protection</li><li>• 24 VAC @ 80 VA</li></ul>		<p><b>GS-MAX 8 TRIAC WITH ADAPTOR</b></p> <ul style="list-style-type: none"><li>• 8 x 24VAC output</li><li>• High-speed operation of the dosing output</li></ul>
	<p><b>GS-MAX 4 AI WITH ADAPTOR</b></p> <ul style="list-style-type: none"><li>• 4 Analog Inputs</li><li>• Active/ Passive Sensor</li><li>• 0-20 mA</li><li>• Feed Voltage – 24 DC</li></ul>		<p><b>GS-MAX 16 DI WITH ADAPTOR</b></p> <ul style="list-style-type: none"><li>• 16 Digital Inputs</li><li>• Dry/ Active Contact</li><li>• Feed voltage - 24 DC</li></ul>



PRODUCT IMAGE	DESCRIPTION
	<p><b>ALUMINUM STAND FOR GS-MAX STAND-ALONE</b></p> <p>The stand is for use with the GrowSphere™ MAX controller as a stand-alone i.e., when the controller is not connected to FertiKit™</p>
	<p><b>MOBILE SMA ANTENNA - PR1US440</b></p> <p>The mobile antenna is connected externally to improve the communication between the controller and the cloud</p>
	<p><b>Power supply 60W, DIN Rail, Single 24V DC</b></p> <p>5V DC power supply for modem, router, switch, and screen</p>
	<p><b>GS-MAX RS232 SERIAL PORT ISOLATED BOARD</b></p> <p>The RS 232 Serial port connects the SingleNet, NetRTU, and Davis weather station to the GrowSphere™ MAX</p>
	<p><b>GS-MAX RS485 SERIAL PORT ISOLATED BOARD</b></p> <p>The RS 485 Serial port connects the RadioNet and the SingleNet base units to the GrowSphere™ MAX</p>
	<p><b>POWER SUPPLY, 15W - 5V, ULTRA SLIM, DIN RAIL</b></p> <p>5V DC power supply for Gateways and Davis weather station</p>
	<p><b>EXTERNAL ANTENNA WITH 7 METER CABLE</b></p> <p><b>WALL BRACKET</b></p> <p><b>6 METER POLE</b></p> <p><b>LTE ANTENNA BRACKET</b></p> <p>To add an external antenna to the GrowSphere™ MAX Controller order two antennas with an LTE bracket to be installed in a 45-degree cross position that matches how LTE signal travels, improving performance. Order the necessary brackets and poles to ensure successful installation in your setup.</p>

CLIMATE SENSORS	
PRODUCT IMAGE	DESCRIPTION
	<p><b>DAVIS WS GROWSPHERE™ DIRECT FULL PACK</b></p> <p>Everything you need in order to connect a station directly to GrowSphere™ MAX: station, the envoy, and the connection from the envoy.</p> <p>Additional catalogue numbers are available on request for spare parts and packages for the GrowSphere Max that can access the Davis Weather Station through the cloud.</p>
	<p><b>MAX MEASURING BOX SE TEMP &amp; HUMIDITY</b></p> <p>Outside temperature and humidity sensor for the GrowSphere™ MAX. A 4-core shielded wired connection to the analog input module.</p>
	<p><b>PYRANOMETER RADIATION 2M CABLE</b></p> <p>Outside radiation sensor with 2 metre cable for the GrowSphere™ MAX.</p>
TRANSMITTER KIT	
	<p><b>ABB AWT 420 EC/pH TRANSMITTER, PANEL MOUNT/WALL MOUNT (TRANSMITTER ONLY)</b></p> <p>This EC/pH transmitter is compatible with the new ABB EC/pH sensors. Through re-configuring, it is also compatible with the old EC/pH sensors. The EC/pH transmitter comes standard with a EC and a pH module, that is replaceable and exchangeable.</p>
	<p><b>EC MODULE REPLACEMENT FOR AWT 420</b></p> <p><b>pH MODULE REPLACEMENT FOR AWT 420</b></p>
EC AND pH SENSORS	
	<p><b>ABB pH SENSOR APS110</b></p> <p>pH sensor for the ABB AWT420 EC/pH transmitter.</p>
	<p><b>ABB EC SENSOR CS150</b></p> <p>EC sensor for the ABB AWT420 EC/pH transmitter.</p>
	<p><b>PVC UNION ADAPTOR FOR ABB SENSOR</b></p> <p>Adaptor fitting for the ABB EC and pH sensors. The adaptor is slightly longer to accommodate the longer ABB EC and pH sensors. This adaptor can also be used with previous EC and pH sensors.</p>



## SIMPLIFY OPERATIONS

- Single-view dashboard
- Easy automation
- Manage multiple mainlines
- Offline or remote control
- Add features as you grow



## OPTIMISE RESOURCE USAGE

- Reduce water usage
- Prevent fertilizer overuse
- Lower energy costs
- Save labour



## PEACE OF MIND

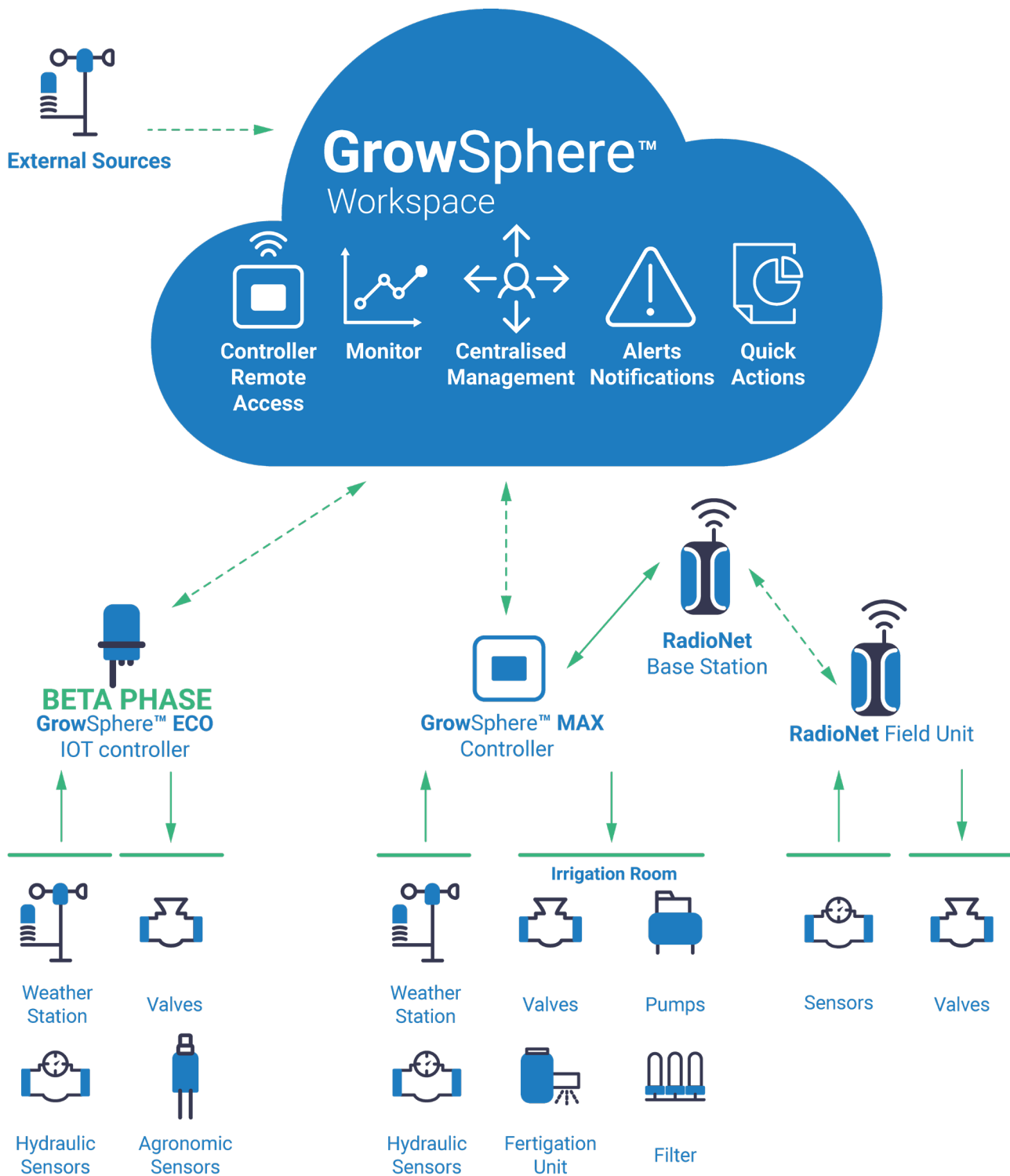
- Instant visibility of irrigation status
- Prevent non-logical hydraulic commands
- Traceability and sustainability



## MORE VALUE PER HECTARE

- Ensure consistent, quality yields
- Prevent crop damage from under/over irrigation or fertigation
- Minimise production costs







# GrowSphere™

Irrigation & Fertigation Operating System

