

GrowSphere™ MAX

Technical Product Page

GrowSphere™ MAX is an intuitive and simple-to-use controller. It is designed to speak the grower's language. The **GrowSphere™ MAX** regulates water and fertilizer delivery in a precision irrigation system. Managing local and remote devices such as pumps, main valves, field valves, and other hydraulic components, ensuring crops receive the optimal amount of water and nutrients at all times.

/ **GrowSphere™ MAX** - Configuration



GrowSphere™ MAX
without screen



GrowSphere™ MAX
with screen



GrowSphere™ MAX
double door with screen

/ Advanced Features

- Intuitive operation that makes irrigation tasks quick and efficient
- Smart alerts and notifications
- Built-in setting validation
- Flexible and secure remote access
- Integrates with the **GrowSphere™** Workspace
- Suitable for all farm sizes
- Modular configuration
- Integrates with the Netafim secured cloud based interface
- Industry standard electric components

/ Supported Irrigation Devices

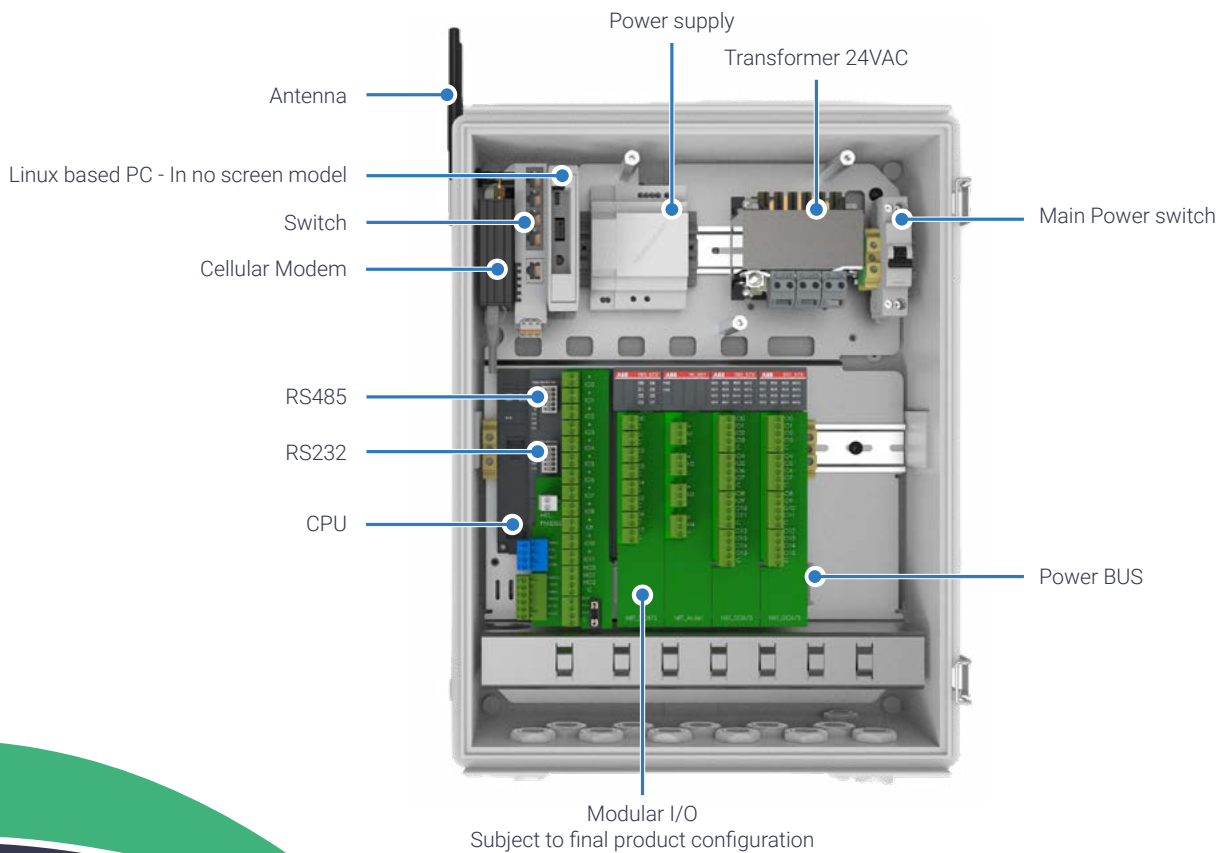
Object	Per Main Line	Total
Main Line	1	4
Main Valve	1	4
Main Water Meter	1	4
Pump Station	1	4
Pumps	3	12
Filter Station	1	4
Filters	32	128
Dosing Stations	1	4
Dosing Channels	8	8
Valves	256	256

/ Programs, Shifts and Recipes

Programs, Shifts and Recipes	Per Main Line	Total
Irrigation Programs	10	40
Shifts per program	32	
Valves Per Shift	32	
Dosing Recipes	10	40

/ GrowSphere™ MAX - Internal Design*

* Subject to product configuration



/ GrowSphere™ MAX - Technical Specifications

→ Processor Module - PM5052

Custom ABB controller

- Memory - 80MB
- 12 DI
- 6 DO
- 1 x RS232 Communication Port for external devices
- 1 x RS485 Communication Port for external devices

→ Screen

- Input - 24VDC
- CPU - quad-core 1.8GHz
- O.S - Linux
- Resolution - 1280*800
- Screen Saver - after 10 min

→ Power Supply

- Main Input - 100 ~ 240 VAC
- 50-60Hz according to configuration
- Rated current - 2.5A @ 24v
- Aux Output PS 5V

→ Cellular Modem - 4G/3G/2G

- 2 Ethernet ports
- Global SIM installed
- Wireless access point

→ Remote Terminal Units

- RadioNet
- SingleNet
- NetRTU

→ Weight and Size

Dimensions:

- Maximum - 35 cm X 45 cm X 20 cm (excluding antennas)

Weight:

- Maximum- 12.4 kg
- Industrial quality (IP65 / UL) enclosure

→ Expandable I/O Modules

Triac output Module:

- 8 x 24VAC output
- High-speed operation of dosing output
- current per channel = 2 A

Relay output Module:

- 16 x 24VAC
- Fuse protected outputs
- Rated current per group = 10A max

Digital Input module:

- 16 Digital inputs
- Feed (Sourcing) voltage – 24 VDC
- Maximum 4 pulses in Sec (Software limitation)

Analog Input module:

- 4 Analog inputs
- Feed (Sourcing) voltage – 24 VDC
- Resolution – 0-20mA; 4 -20mA; 12 bit

/ GrowSphere™ MAX - Catalog numbers

GrowSphere™ MAX

Material	Material Description
74702-000001	GS-MAX-DISP-220V-6DO-12DI
74702-000048	GS-MAX-DD-110V-6DO-12DI-8TRC
74702-000049	GS-MAX-NO_DISP-220V-6DO-12DI-8TRC
74702-000050	GS-MAX-DD-220V-6DO-12DI-8TRC
74702-000051	GS-MAX-NO_DISP-110V-6DO-12DI-8TRC
74702-000052	GS-MAX-NO_DISP-220V-6DO-12DI
74702-000054	GS-MAX-NO_DISP-110V-6DO-12DI
74702-000062	GS-MAX-DISP-220V-22DO-12DI-4AI-8TRC
74702-000063	GS-MAX-DISP-110V-6DO-12DI
74702-000065	GS-MAX-DISP-220V-22DO-12DI
74702-000067	GS-MAX-DISP-220V-6DO-12DI-8TRC
74702-000068	GS-MAX-DISP-110V-6DO-12DI-8TRC
74702-000069	GS-MAX-DD-220V-6DO-12DI
74702-000070	GS-MAX-DD-110V-6DO-12DI
74702-000072	GS-MAX-DD-110V-6DO-12DI_USA
74702-000073	GS-MAX-NO_DISP-110V-6DO-12DI-8TRC_USA
74702-000074	GS-MAX-DD-110V-6DO-12DI-8TRC_USA

/ GrowSphere™ MAX - Catalog numbers

Spare parts

Material	Material Description
74743-000098	GS-MAX 16 RELAY WITH ADAPTOR
74743-000099	GS-MAX 8 TRIAC WITH ADAPTOR
74743-000100	GS-MAX 4 AI WITH ADAPTOR
74743-000101	GS-MAX 16 DI WITH ADAPTOR
74743-000005	Power supply 60W, DIN Rail, Single 24V DC
74743-000144	POWER SUPPLY,15W- 5V, ULTRA SLIM, DIN RAIL
74743-000014	GS-MAX RS232 SERIAL PORT ISOLATED BOARD
74743-000017	GS-MAX RS485 SERIAL PORT ISOLATED BOARD
74743-000155	ANTENNA 2.4G-5G SMA-RP SY2400
74743-000166	FLOLIVE UICC SIM CARD
74741-000131	Cable, RF SMA M to F, 5M
74741-000187	SOLAR PANEL 11W, with 5 M cable
74743-000254	STYLUS PEN
74743-000251	ANTENNA, 4G OMNI, F600-2700MHZ, G9DBI
74743-000003	AC500,PROG.LOG.CONTROLLER 80MB
74743-000250	N.A MODEM MOBILE SMA ANTENA PR1US540
74746-000081	CIRCULAR CONNECTOR, RCPT, 3POS, CABLE-2D CC
74743-000102	COVER WITH DISPLAY-DOOR ASSY R/SIDE
74743-000065	ADAPTOR CARD FOR CPU-B
74743-000066	ADAPTOR CARD FOR DO573-2
74743-000068	ADAPTOR CARD FOR DO572
74743-000069	ADAPTOR CARD FOR AI561-3
74715-000007	5M-RF-CABLE M TO F
74702-000077	ALUMINUM STAND FOR GS-MAX STAND ALONE



Technical Resources