

OPTAGROW REGULATOR



DESCRIPTION

The OPTAGROW is a centralised climate, fertilisation-irrigation and heating management computer for your horticultural, market garden and research greenhouses. Thanks to its modular input/output board system, it is scalable over time as your operation grows. Its colour touch screen makes it easy to use, providing quick and easy access to all your data. You can also control the OPTAGROW from your phone, tablet and computer. A host of software features and display optimisations make the OPTAGROW the most powerful product in the ANJOU AUTOMATION range.

SPECIFICATIONS

- Centralised climate, fertilisation-irrigation and heating management PLC
- 2 touch screen sizes: 10" or 15"
- Control of 1 to 12 climate zones with a modular number of outputs per zone
- Boiler module (up to 4 boilers - 8 transports and an Open Buffer)
- Control of up to 190 solenoid valves
- Up to 4 irrigation stations (fertilisation or clear water)
- Compatible with the ARTIC Sentinelle
- Access by phone, tablet and computer

OPTAGROW REGULATOR

CONTROLLABLE CLIMATE FUNCTIONS

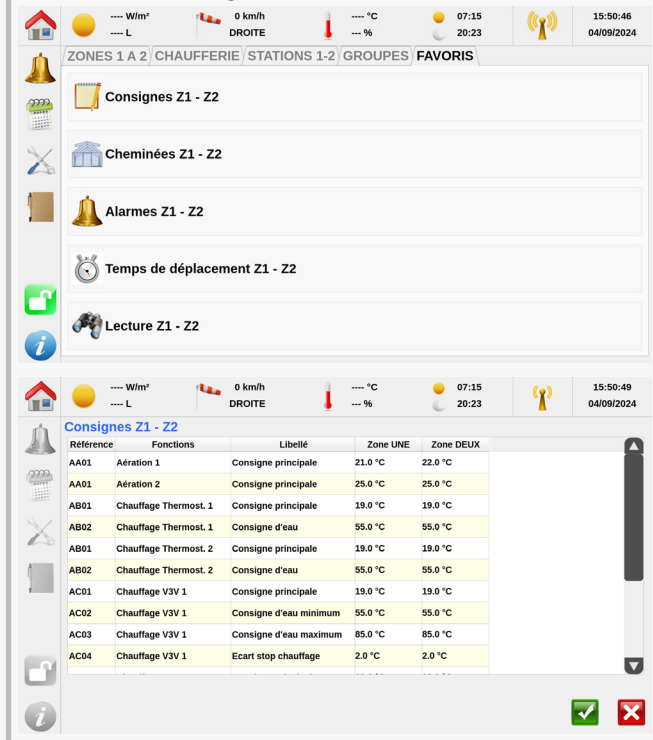
Function	Description	Number of outputs
1 side or single pitch ventilation	Regulation proportional to ambient temperature Weather protection (wind, rain) Outside influences (wind, wind vane, outside temperature, sunshine) 24-hour temperature integration	2
Ventilation on 2 sides or double roof pitch	Regulation proportional to ambient temperature Weather protection (wind, rain) Outside influences (wind, wind vane, outside temperature, sunshine) 24-hour temperature integration	4
Shade / Thermal screen	Shade mode depending on sunlight (Watt/m2) Thermal mode depending on ambient temperature Outside influences (outdoor temperature)	2
On-off heating (discrete)	Thermostatic regulation depending on the ambient temperature Possibility of managing a circulator at one water temperature separately from the unit heater.	1
Heating 3-way valve + circulator	Proportional regulation depending on the ambient temperature and the water circuit temperature Outside influences (wind, outside temperature, sunshine) Circulator management depending on the water circuit temperature. 24-hour temperature integration	3
Dehumidification	Regulation of ambient humidity levels Influence on the ventilation, heating and shading	-
Inflation	Fan operation management by cue and difference Outside influence (wind speed)	1
FOG	Regulation proportional to ambient temperature and/or humidity Influence on the ventilation	1
CO2	Cue and difference management of CO2 injection operation Influence on the ventilation	1
Cooling	Management of a pump and 1 to 3 extractor units depending on the ambient temperature Influence on the ventilation	2 to 4
Clock / lighting	Start-up based on hourly start times or depending on connected sensors (adjustable thresholds). Applications: photosynthetic lighting, irrigation, etc.	1
Air mixers	Thermostatic regulation depending on the ambient temperature and/or the ambient humidity Possible combination with the heating operation	1
Alarm	Activation on an exceeded high or low threshold (temperature or humidity) or regulator operating fault (network, sensors disconnected, etc.). Normally closed output on powering on	1

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CLIMATE MANAGEMENT & ERGONOMICS NEW FEATURES

Favourites tab

Quick access to the main menus with multi-zone viewing and editing.

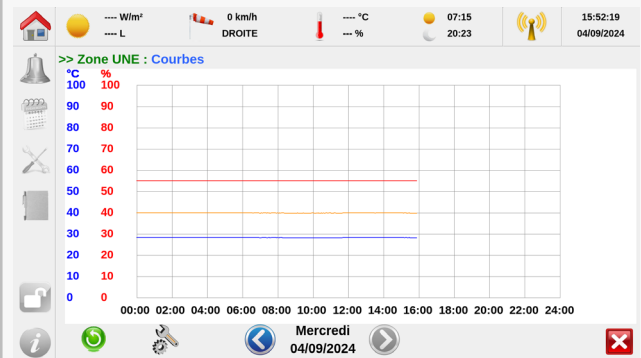


Modbus communication

ModBus communication ports for communication between PLCs or with external devices. Contact us.

Graph tool

Visible sensors and customisable scales on the regulator screen.



New range of sensors

Ventilated box on request with measuring range -10°/60°

Climate periods

Up to 10 climate periods per day, customisable by function and zone.

Water deficit

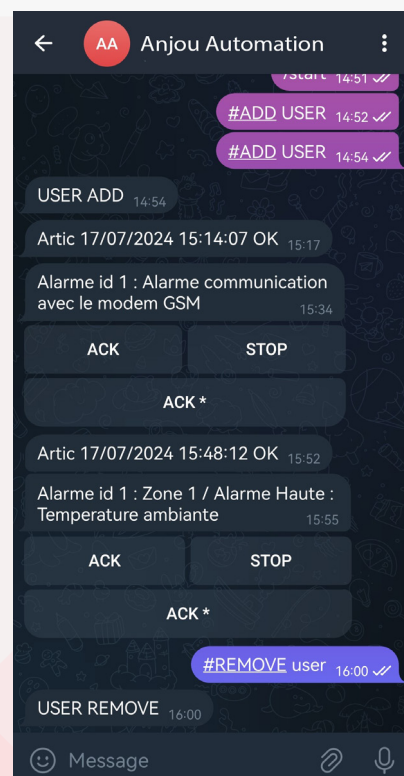
Choice by zone if working using Water Deficit or Relative Humidity.

Dimmable lighting

LED lighting dimming management using PAR measurement by 0-10V command

Alarm management

Push notification to reset alarms.



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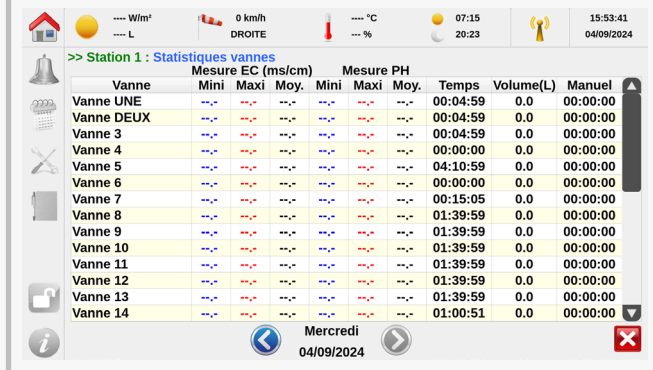
IRRIGATION MANAGEMENT NEW FEATURES

Irrigation periods

4 periods per Irrigation Group to vary the EC / pH set point and/ or the irrigation time.

Valve statistics

Precise statistics per valve and per day.



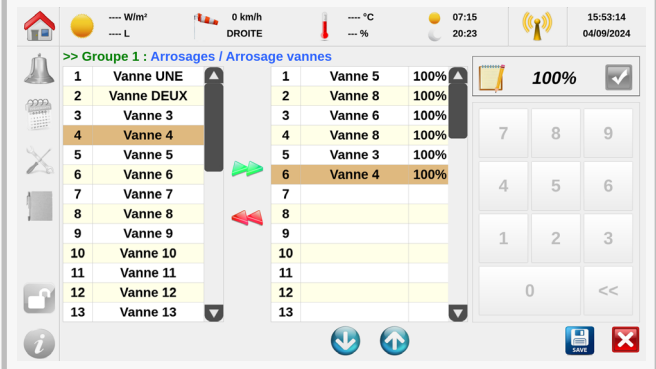
>> Station 1 : Statistiques vannes

Vanne	Mesure EC (ms/cm)			Mesure PH			Temps	Volume(L)	Manuel
	Mini	Maxi	Moy.	Mini	Maxi	Moy.			
Vanne UNE	---	---	---	---	---	---	00:04:59	0.0	00:00:00
Vanne DEUX	---	---	---	---	---	---	00:04:59	0.0	00:00:00
Vanne 3	---	---	---	---	---	---	00:00:00	0.0	00:00:00
Vanne 4	---	---	---	---	---	---	04:10:59	0.0	00:00:00
Vanne 5	---	---	---	---	---	---	00:00:00	0.0	00:00:00
Vanne 6	---	---	---	---	---	---	00:15:05	0.0	00:00:00
Vanne 7	---	---	---	---	---	---	01:39:59	0.0	00:00:00
Vanne 8	---	---	---	---	---	---	01:39:59	0.0	00:00:00
Vanne 9	---	---	---	---	---	---	01:39:59	0.0	00:00:00
Vanne 10	---	---	---	---	---	---	01:39:59	0.0	00:00:00
Vanne 11	---	---	---	---	---	---	01:39:59	0.0	00:00:00
Vanne 12	---	---	---	---	---	---	01:39:59	0.0	00:00:00
Vanne 13	---	---	---	---	---	---	01:39:59	0.0	00:00:00
Vanne 14	---	---	---	---	---	---	01:00:51	0.0	00:00:00

Mercredi 04/09/2024

Group programming

Possibility of choosing the order of your solenoid valves and including the same solenoid valve in a same Group several times



>> Groupe 1 : Arrosages / Arrosage vannes

1	Vanne UNE	1	Vanne 5 100%
2	Vanne DEUX	2	Vanne 8 100%
3	Vanne 3	3	Vanne 6 100%
4	Vanne 4	4	Vanne 8 100%
5	Vanne 5	5	Vanne 3 100%
6	Vanne 6	6	Vanne 4 100%
7	Vanne 7	7	
8	Vanne 8	8	
9	Vanne 9	9	
10	Vanne 10	10	
11	Vanne 11	11	
12	Vanne 12	12	
13	Vanne 13	13	

100% [checkmark]

4/20mA or pulse flow meter

Possibility of connecting a 4-20 mA flow meter for direct reading. Pulse signal required for statistics.

External FTE management

Precise management of irrigation cycles for outdoor beds.

Group programming window

Details of each programmed irrigation group



>> Groupe 1 - 16:00 SEQ/TPS/CYC

Type d'arrosage	SEQUENTIEL
Mode d'arrosage	TEMPS
Temps de remplissage	0 s
Temps de prémélange	0 s
Temps de mise en eau	00:00:00
Temps d'arrosage	01:40:00
Temps de vidange	0 s
Temps de rinçage	00:00:00

Vannes

Vanne UNE (00:05:00)	Vanne DEUX (00:05:00)	Vanne 3 (00:05:00)
Vanne 5 (01:40:00)	Vanne 5 (01:40:00)	Vanne 5 (01:40:00)
Vanne 5 (01:40:00)	Vanne 5 (01:40:00)	Vanne 5 (01:40:00)
Vanne 5 (01:40:00)	Vanne 6 (01:40:00)	Vanne 7 (01:40:00)

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COMPATIBLE INDOOR SENSORS

Photo	Ref	Signal	Range	Ventilated
	Ambient temperature sensor			
	CAP0080	4- 20mA	-10° / 60°	NO
	CAP0080.V	4- 20mA	-10° / 60°	YES
	Ambient temperature and humidity sensor			
	CAP0081	4- 20mA	-10° / 60°	NO
	CAP0081.V	4- 20mA	-10° / 60°	YES
	WATER TEMPERATURE SENSOR			
	CAP0012	4- 20mA	-34° / 100°	-
	CAP0012.A	4- 20mA	-34° / 100°	-
	Ground temperature sensor			
	CAP0082	4- 20mA	-10° / 60°	-
	CO2 sensor			
	CAP0040	4- 20mA	0 - 5000 ppm	NO
	Cerberus inclinometer module			
	CAP0060	4- 20mA	-55° / 55°	-
	Add a CLI6040 inclinometer module			

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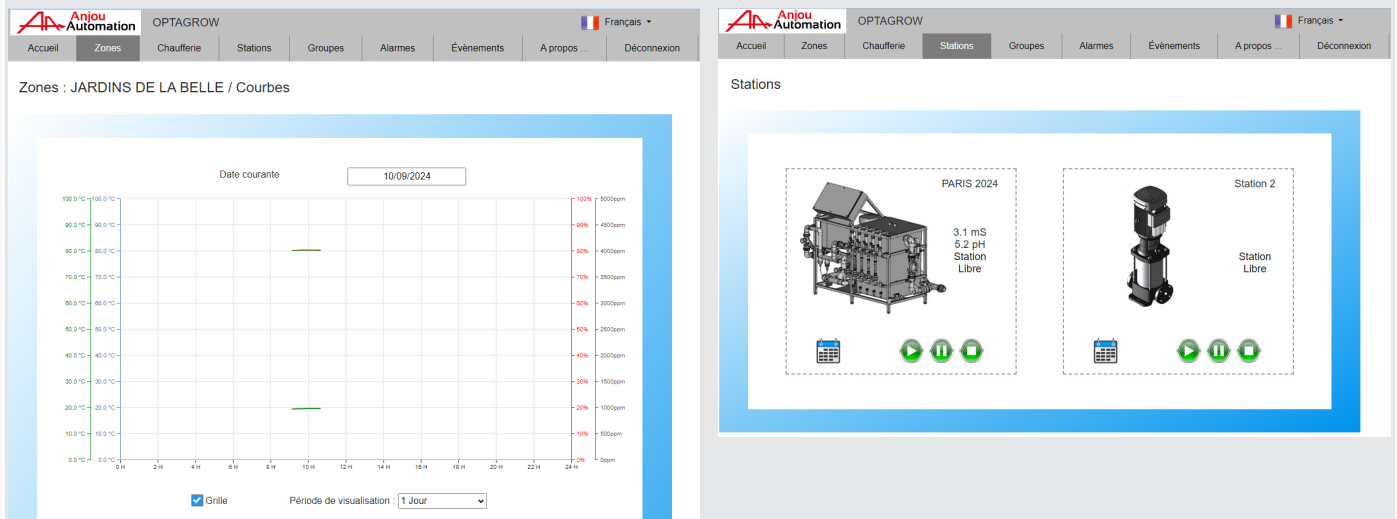
COMPATIBLE WEATHER SENSORS

Photo	Ref	Measurement	Signal	Range
	Outdoor temperature sensor			
	CAP0071	Temperature	4- 20mA	-34° / 100°
	Outside humidity sensor			
	CAP0004	Humidity	4- 20mA	0 / 100%
	Outside temperature and humidity sensor			
	CAP0072	Temperature & Humidity	4- 20mA	-34° / 100°
	Sunlight and luminosity sensor			
	CAP0013	Watt / m ²	4- 20mA	0-1500 W/m ²
	CAP0017	Lux	4- 20mA	0-100 Klux
	CAP0018	Watt / m ² & Lux	4- 20mA	0-1500 W/m ² - 0/100KLux
	Wind vane sensor			
	CAP0022	Wind direction	Dry contact	2 directions
	CAP0025	Wind direction	4- 20mA	0-360°
	Rain gauge			
	CAP0026	Rainfall in mm	Dry contact	-
	Wind sensor			
	CAP0021	Wind speed	Frequency	-
	Rain sensor			
	CAP0030	Rain detection	DISCRETE	-

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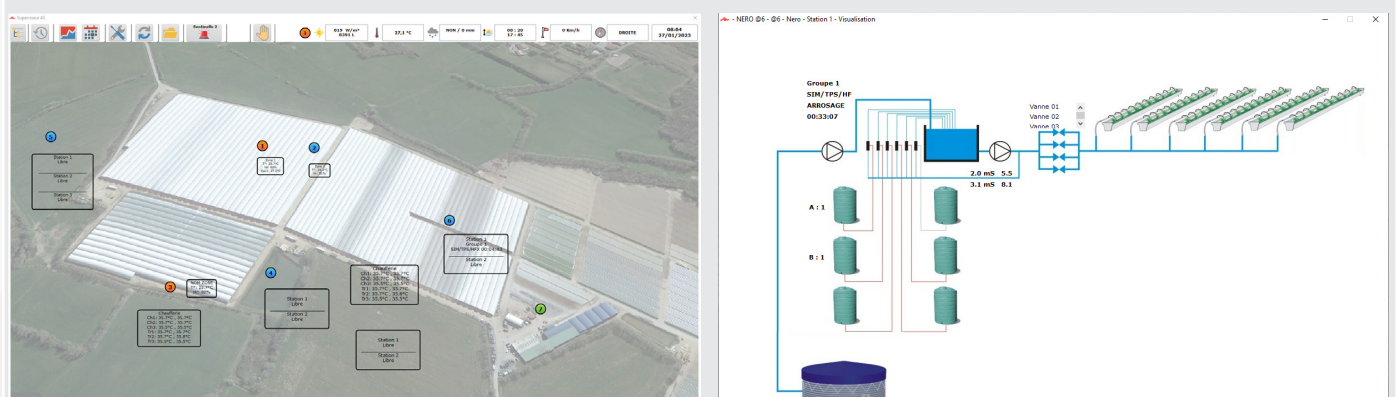
REMOTE ACCESS

Compatible with embedded website



using a 4G modem directly built into the Optagrow - Anjou Data SIM card required

Compatible with Supervision



using CLI8005 direct supervision software