

Technical Data



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> Agronic 2500



DESCRIPTION:

Application

- Irrigation and fertigation control unit
- Applications in open field, fruit farming and vineyards, tunnel and glasshouses

Specifics

- LCD display - 128 x 64, backlit
- Waterproof soft-touch keyboard, alphanumeric and specific menu keys
- Language: Italian (others on request)
- Box version for free installation
- Built-in version for installation in electric panel

Hardware Features

- Expandable outputs: 9 - 18 - 27
- Digital inputs: 6
- Analog inputs: 2 (optional)
- 220/24VAC transformer included in the specific model
- Free installation box dimensions: mm 220 x mm 190 x mm 110

Materials

- Free installation box: PC/ABS
- Front panel: aluminium
- Box support: stainless steel

Automation

Power supply	Command	Stations					
		9		18		27	
		Box Code	Built-in Code	Box Code	Built-in Code	Box Code	Built-in Code
220 V AC	24 V AC	OPG2500	OPG2503	OPG2501	OPG2504	OPG2502	OPG2505
Battery	12 V DC	OPG2506	OPG2509	OPG2507	OPG2510	OPG2508	OPG2511
Solar panel	Latch 2 W	OPG2512	OPG2515	OPG2513	OPG2516	OPG2514	OPG2517
Solar panel	Latch 3 W	OPG2518	OPG2521	OPG2519	OPG2522	OPG2520	OPG2523
220 V AC + Diesel	12 V DC/24 V AC	OPG2524	OPG2527	OPG2525	OPG2528	OPG2526	OPG2529
Battery with charger	12 V DC	OPG2530	OPG2533	OPG2531	OPG2534	OPG2532	OPG2535

Irrigation specifications

- The Agronic 2500 can operate up to 27 irrigation sectors, manageable through 50 independent irrigation programs. Up to 4 irrigation sectors can be activated simultaneously and two active programs simultaneously
- Management of the irrigation cycle through weekly calendar, frequency of irrigation, in sequence of programs or through external input
- Management of the irrigation period by time (hh: mm) or by volume (m³)
- Management of the water meter through the EV system launches pulses for the separate accounting of irrigation volumes, according to the parameters entered and planned

Fertigation specifications

- Up to 4 independent fertilizers can be managed
- Independent pre and post irrigation time management for each program
- Fertigation managed by time or by volume
- Management of mixer for tanks with intermittent or continuous programmable activation
- Fertilizer injection achievable in "series" or "parallel"
- In the parallel configuration the programmed fertilizers are all injected simultaneously each with a dedicated injection channel, in the series configuration they are injected one at a time through a single injection channel

Master valve / pump specifications

- Up to two outputs dedicated to the management of master valves or generic electric pumps are available
- Possibility of setting the activation irrigation sectors for each

Filtration specifications

- Up to 9 filters can be managed
- User-settable washing and pause time between filters
- Washing started by timer (hh:mm), differential pressure switch (mca) or volume of water (m³) if there is a volumetric meter
- During the washing phases, irrigation and fertilizer injection operations can be interrupted
- Control of differential pressure switch malfunction in case of repeated cleaning cycles without checking

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Specifications PLUS Option

- The Plus option that can be inserted both in the Agronic 2500 purchase phase and that can be inserted on already installed machines allows the software to expand the management possibilities of specific parameters to respect needs of the operator

Program activation:

- possibility of defining a specific sequence of activation / deactivation days for pulsed irrigation, defining a pause time between repeated activations; program duration limit, in case you work with on / off via program sensors with activations in specific time periods
- safety time between irrigation starts to prevent continuous commands when sensors are activated

Fertigation:

- uniform management of fertilizer injection; the software will inject the fertilizer

for the entire duration of the useful irrigation cycle

Irrigation management:

- possibility of using the formats m³/ha (cubic meters per hectare) or l / ha (liters per hectare); determining factors: the possible conditions are increased from 5 to 30 for which it is possible to automatically change the behavior of irrigation or other managed parameters; digital, analogue sensors, meters or integrated data from a previous irrigation can be used

Command description:

- textual descriptions for programs, sectors, sensors and determinants

Sensors:

- management of up to 10 meters (up to 4 for fertilizers remaining for irrigation) plus 20 analog sensors and 20 digital sensors

PLUS Option

	Code	Description
Necessary option for analog sensors management. It increases Agronic 2500 performances. Activation by unblock code	FER2501	Agronic 2500 Plus Option

Agrobee Option

	Code	Description
Agrobee option allows control of the field equipment by a codified radio system. It includes: Agrobee coordination device, omnidirectional antenna, 10 mt connection cable	FER2507	Agrobee ZIGBEE interface for Agronic
	FER2520	Agrobee LoRa interface for Agronic
Agrobee LoRa standard system - agrobee ZIGBEE on request		

Diesel Engine Control Option

	Code	Description
By this option, agronic 2500 can manage a diesel engine with all the necessary parameters. On/off command, contact, pre-heating. Activation by unblock code	FER2500	Diesel engine control box option

Analog Inputs Option

	Code	Description
Management of 2 analog inputs (it requires the plus option installed)	FER2508	Analog inputs option

SDI Expansion Option

	Code	Description
SDI expansion 12 + 4 analog outputs x A 2500	FER2516	SDI 112 option + 4 Ext. anal.

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Communication specifications

- Agronic 2500 can interface with the user in different ways depending on the instrument to be used and the characteristics of the connection itself
 - For remote management of the Agronic 2500, smartphones, PDAs, tablets and PCs can be used via an internet connection and software that can be used via cloud - in the case of local connections, a PC software will be available to install
 - Possibility of interfacing the Agronic 2500 with a local PC via RS232 connection (max 20 mt approx) or RS485 (max max approx 200 mt).
 - GPRS modem communication
 - Possibility of interfacing via GPRS communication from any instrument with Wi-Fi or LAN access to the internet - an M2M SIM is required
- Wi-Fi communication*
- Possibility of interfacing with an existing wi-fi network to give access to the internet
- Radio communication*
- Possibility of communication via radio link, up to 20 km in relation to the orography of the territory, in the event that no other type of communication is possible

Transformers	Code	Description
Optional standard transformer for 2 outputs 12 V DC, mains 220 V AC	FER2512	transformer 220V - 12V DC 2A
Optional standard transformer for 2 outputs 24 V DC, mains 220 V AC	FERC974	transformer 220V - 24V AC 50vA
Control board x Agronic with transformer	EQEA024	Transformer 230/24V AC 100 V A x Agronic

Solar panel	Code	Description
Solar panel for control unit supply (12 V DC and Latch)	FER2510	solar panel 5W with support
Solar panel for control unit supply (12 V DC and Latch)	FER2511	solar panel 10W with support
Charge regulator for solar panel including 7 Ah battery	FER2519	solar panel regulator with battery

Battery	Code	Description
Ni/Pb watertight battery, rechargeable (12 V 7 Ah)	FER2513	battery 7 Ah

Communication - Hardware	Code	Description	
Local communication via cable	RS485 max 100 mt	FER2518	communication with local pc, port RS485
	USB 2.0 max 3 mt	FER2504	communication with local pc, port USB
Remote communication	Modem GPRS (SIM)	FER2503	GPRS mobile device communication
	Wi-Fi max 50 mt	FER2017	Wi-Fi communication
	RADIO max 2 km	FER2505	PC 433 MHz radio communication

Communication - Software	Code	Description
It supplies access to the system by Agronic App and/or Web GPRS modem or Wi-Fi module requested. Activated by unblock code	FER194	WEB platform (including Agronic APP and Agronic WEB)