Controller for advanced irrigation powered by an electrical grid or photovoltaic panel

{....much more than just a controller for irrigation ....}

DESIGNED&PRODUCED BY **SPAGNOL**

i-Fenix

SPAGNOL
i-Fenix

I-Fenix is a controller for the complete management of the irrigation system powered by an electric network or a photovoltaic panel. It controls the irrigation valves, the main irrigation pump that supplies the system and the washing of the filters. It is modular and expandable. Irrigation can be monitored both in time and quantity by multiple and flexible programs. Specific sensors control fog, mist, antifreeze, and radiation accumulation. Irrigation valves can be distributed in long distance open field and controlled by remote panels or via the Spagnol radio system. With the **MC-Net**, **MC-Cloud**, **MC-SMS** services, the user always has complete remote control of the system..

I-Fenix Irrigation controller

CONTROLLER FOR THE MANAGEMENT OF THE IRRIGATION SYSTEM

Designed and built for every need in which it is necessary to manage the irrigation system in an automated and precise way.

I-Fenix can control the irrigation valves, the start of the irrigation, (by timer setting / hour setting / accumulation of radiation / external input / antifreeze / fog-mist), filter washing, the irrigation pumps, the flow sensors of the irrigation lines, the water storage tanks, the electrical generator and much more. I-Fenix can be connected to a wide range of sensors, such as the radiation sensor for storage irrigation, the temperature and humidity sensor for fog / mist management, the irrigation flow sensor, and many more.

If necessary, i-Fenix can be expanded by special boards to accommodate new boards. The expansion panels are connected to i-Fenix by simple BUS cable even at long distances.

 i-Fenix is available with 230 / 240VAC power supply (24VAC outputs) or photovoltaic panel (latch outputs for impulse solenoids)
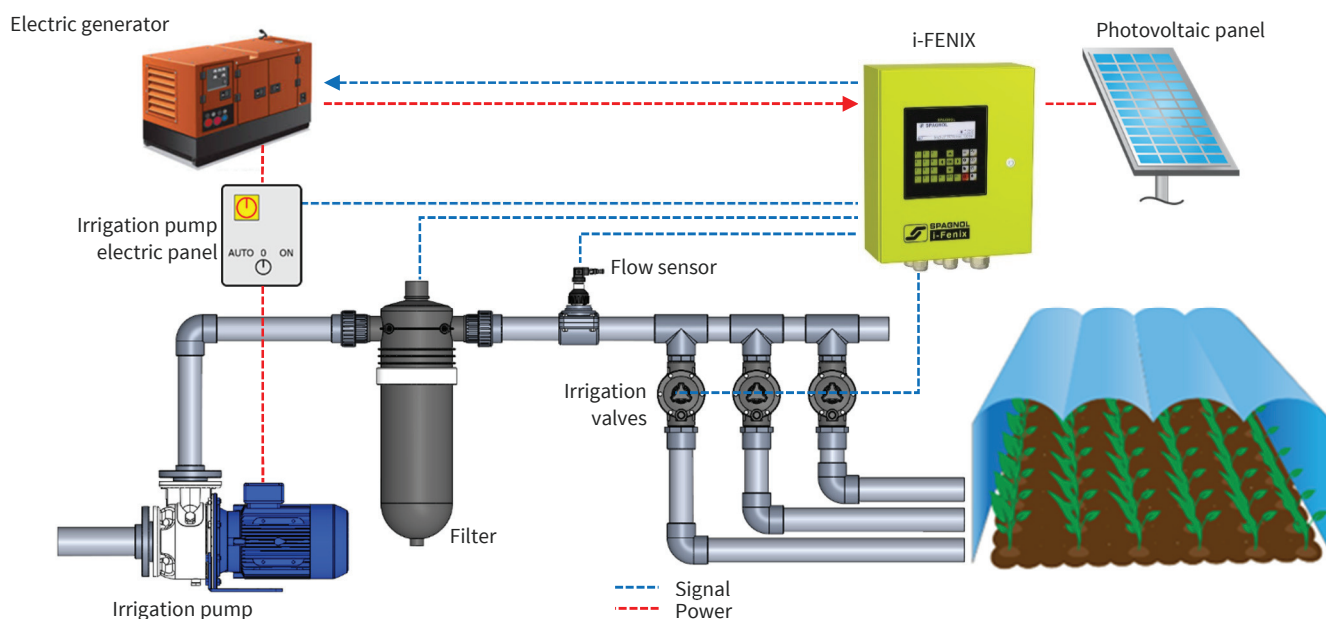
In case of LONG distances between I-Fenix and the irrigation valves, these can be managed via radio in a safe and reliable way thanks to Spagnol radio system.

The mobile modem accessory allows you to receive text messages or calls in case of alarms or anomalies. On i-Fenix with 230 / 240VAC power supply, this accessory combined with the power backup accessory allows YOU to be informed in case of power failure from the network.

Like all Spagnol controllers, i-Fenix can also be supervised with Spagnol MC-Cloud and managed through the Web portal or with the Android and iOS app. The connection can be made via a network cable (with internet connection) or by installing the mobile modem accessory. In any case, it is always possible to supervise I-Fenix on-premises (installation on site) using the Spagnol-MCNet supervision software. MIXED CLOUD/ON-PREMISES SOLUTIONS ARE ALSO POSSIBILE.

• 24 multifunction irrigation programs
• Up to 24 irrigation valves
• Up to 4 irrigation lines

Electric generator

i-FENIX

Photovoltaic panel

Irrigation pump electric panel

AUTO 0 ON

Flow sensor

Irrigation valves

Filter

Irrigation pump

- - - Signal
- - - Power

i-FENIX BASE:

	Code	Description
	302001001	FENIX-M-23S-I, Controller i-Fenix electric power 220-240VAC 50-60Hz, completed of: • 8 relay outputs[1] for the command of 24VAC loads[2] (standard outputs configuration: 7 zone valves + 1 irrigation pump) • 4 S-BUS sensor inputs[1] • 6 contact sensor inputs [1] • 2 free slots for I/O expansion boards
	302001003	FENIX-M-PV-I, Controller i-Fenix electric power from photovoltaic panel (included), completed of: • 4 latch outputs [1] for the command of 2/3 wires latch solenoids[3] (standard outputs configuration: 4 zone valves) • 4 S-BUS sensor inputs[1] • 6 contact sensor inputs [1] • 2 free slots for I/O expansion boards

[1] Outputs and inputs have predefined factory function (see product manual). Outputs and inputs function can be customized by using the USB console cable or Bluetooth console board (see Accessories).   [2] Maximum total load: 80VA.   [3] Configurable 9÷28VDC 10÷100ms

SENSORS:

		Code	Required sensor input type:	
			S-BUS	Contact
	Radiation sensor for the irrigation by radiation sum (Joule)	**303002001**	✓	
	Temperature and humidity sensor (for fog/mist irrigations)	**303001001**	✓	
	Irrigation line flow sensor	Page 124		✓

EXPANSION BOARDS:

		Code	Compatible with:	
			FENIX-M-25-I	FENIX-M-PV-I
	8 relay outputs board	**ESH0141**	✓	
	4 latch outputs board	**ESH0142**		✓

ACCESSORIES:

	Description	Code		Description	Code
	Cellular modem for alarm reporting and cloud service* (*subscription required)	**304003001**		Expansion boxes	Page 131
	Backup power (only for FENIX-M-23S-I)	Page 133		Electric generator command output	**ATT0082**
	Cloud service	Page 146		Console USB cable	**EAP0816**
	Radio system	Page 140		Console Bluetooth board	**304003006**