

## ☆☆☆ **SAPIR 2** ☆☆☆

### Professional internet enabled controller for single irrigation head

The **SAPIR 2** is the next generation of central control irrigation systems. It allows combining various technologies to suit each project specific needs. It is an **Internet enabled controller** so the user can control everything from his **PC or Smartphone**.

The **SAPIR 2** is the perfect solution for small to medium irrigation projects with a single irrigation head, suitable for both simple and most demanding applications.

### General Features:

#### **Modular & Flexible Hardware:**

- **Maximum 32 outputs** – Can be divided between local and radio RTU
- **Local on-board:**
  - **Modular 4 / 8 / 12 / 16 Outputs** – 12V DC Latch or 24V AC
  - **8 Digital inputs** – Water meter, fertilizer meters, DP, water level float and etc.
  - **4 Analog inputs** – Pressure sensor, ultrasonic water meter, tensiometer and etc.
- **Radio RTU** – License free, up to 3 km (30 km with repeaters)
- **Ph/EC control** – Handles single fertilization injection unit
- **Weather station** – Supplying data for irrigation by ET, Frost protection and Rain shutdown
- **Analog inputs** – Directly from the controller or remotely through Radio RTU (SDI-12 / 4-20ma / 0-5v)

#### **Irrigation:**

- Up to 16 irrigation programs
- Water dosage by Time, Volume, Volume per area and ET
- Irrigation by days of the week or cycle of days
- Single cycle or pulse irrigation
- Start: by time, by condition, manually
- Flexible programming – Valve by valve, groups by group or combination of both
- Main valve operation delayed, advanced, or together with the irrigation valves

#### **Fertilization:**

- Up to 4 fertilizers and booster control
- Fertilization modes: Time (h:m:s), Volume (Liters), Concentration L/m<sup>3</sup> and Proportional volume
- Three stage fertigation: pre- watering, injection, post watering

#### **Backflush:**

- Flushing by time, by PD or by both
- Definable parameters: Flushing interval, Pre dwell time, Dwell time, Flushing time, PD delay
- Endless looping detection and prevention
- Accumulation of flushing cycles by time and by PD

#### **Alarms:**

- High flow, Low flow, Water leakage, Low pressure
- Fertilizer leakage, No pulses from fertilizer injector
- PD sensor failure
- Low battery, No AC

#### **Communication:**

- New PC software, Java based - **DREAM CONSOLE**. Simple to use, powerful and modern
- New Smartphone application – **DREAM SPOT**. From any device on any operating system
- Possible communication channels: **Wi-Fi**, 3G modem
- Push alarm notifications to user phone
- Remote firmware upgrade (OTA)

#### **General:**

- Multi language controller
- Local programming via Wi-Fi direct from smartphone / Tablet (No internet required)
- Dealer definitions allows tailor fitting each controller to each user specific application
- Flexible condition systems allows starting, stopping, waiting and continuing of irrigation programs
- Detailed event log for all system events
- Controller configuration and irrigation programs are saved on nonvolatile memory
- Modern power efficient charging mechanism, prolongs battery life and lowers consumption

#### **Energizing options:**

- 12V DC from a solar panel and a rechargeable battery
- 220V / 110V AC

