Inteligent irrigation with FIBARO

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Nice FIBARO

Agenda:

1. Few words about irrigation system
2. Execution modules for irrigation from FIBARO
3. Integrations and external sensors
4. Garden panel – sprinkler (virtual device)
5. Garden panel – sequences
6. Scenes with irrigation

Few words about irrigation system

1. Automatic garden irrigation is the system of distributed pipes that provide an even and optimal level of moisture in the garden.

2. Installation is devided into appropriate sections.

3. Watering elements are: sprinklers, micro-sprinklers and drip lines which are connected via pipes buried underground.

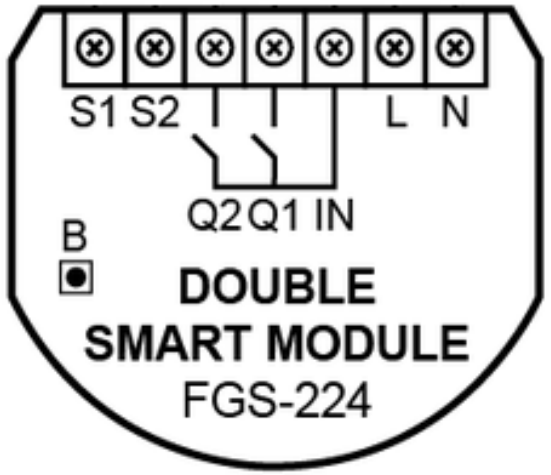
4. Water supply to the watering elements is switched on and off by means of solenoid valves.

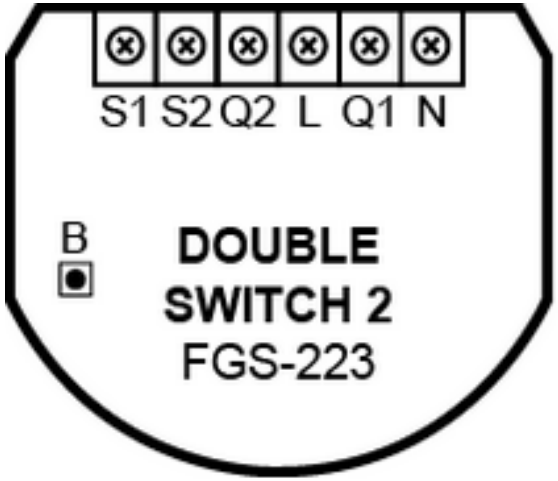
5. In the watering system in the garden we can use different sources of water supply (or several at once).
We can use municipal supply or, using the pomp, we can take the water from deep walls or rainwater tanks.

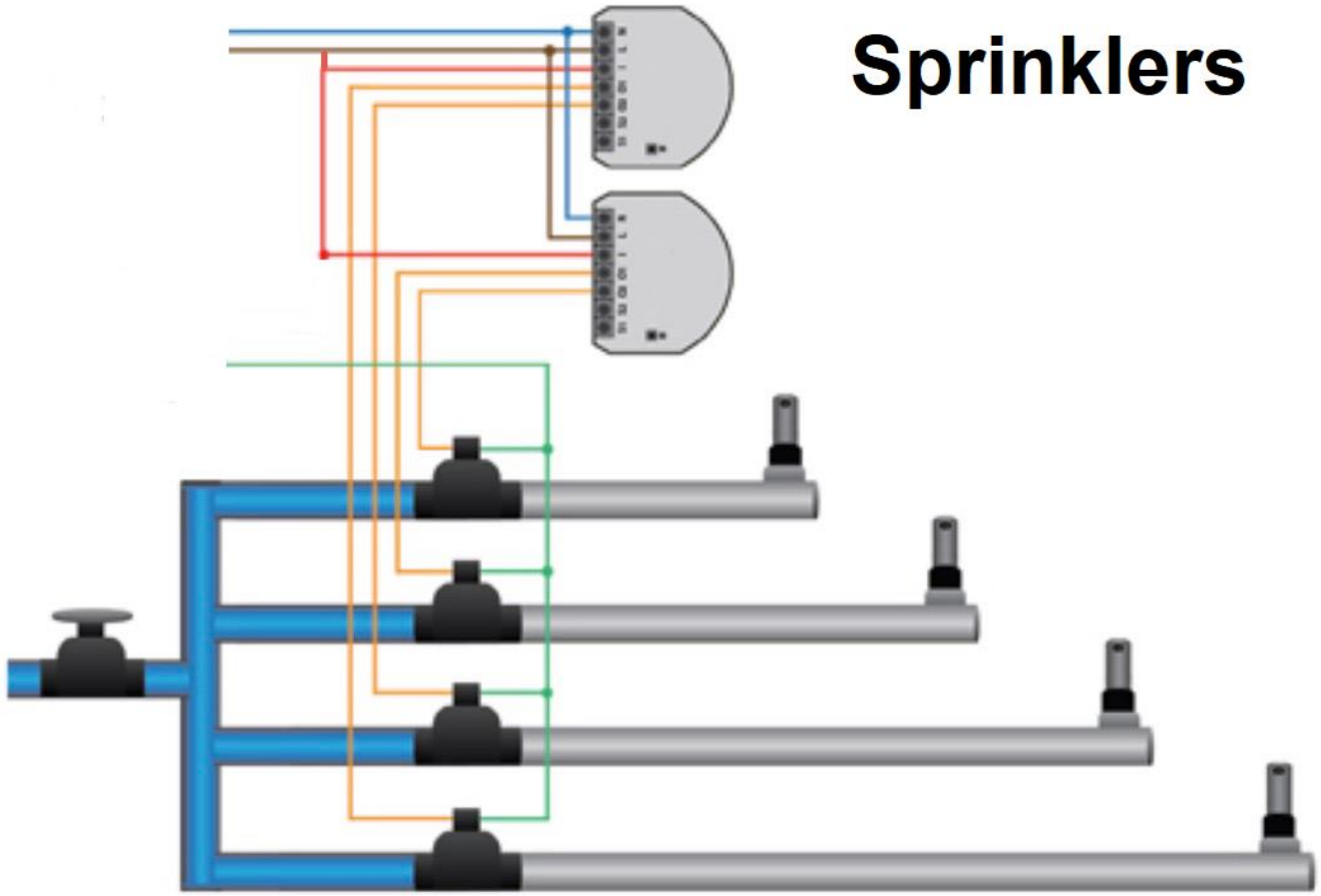
Execution modules

For garden watering, control is accomplished by controlling the power supply to the solenoid valve coil. The best device for that is: FIBARO DOUBLE SMART MODULE

Connection diagram

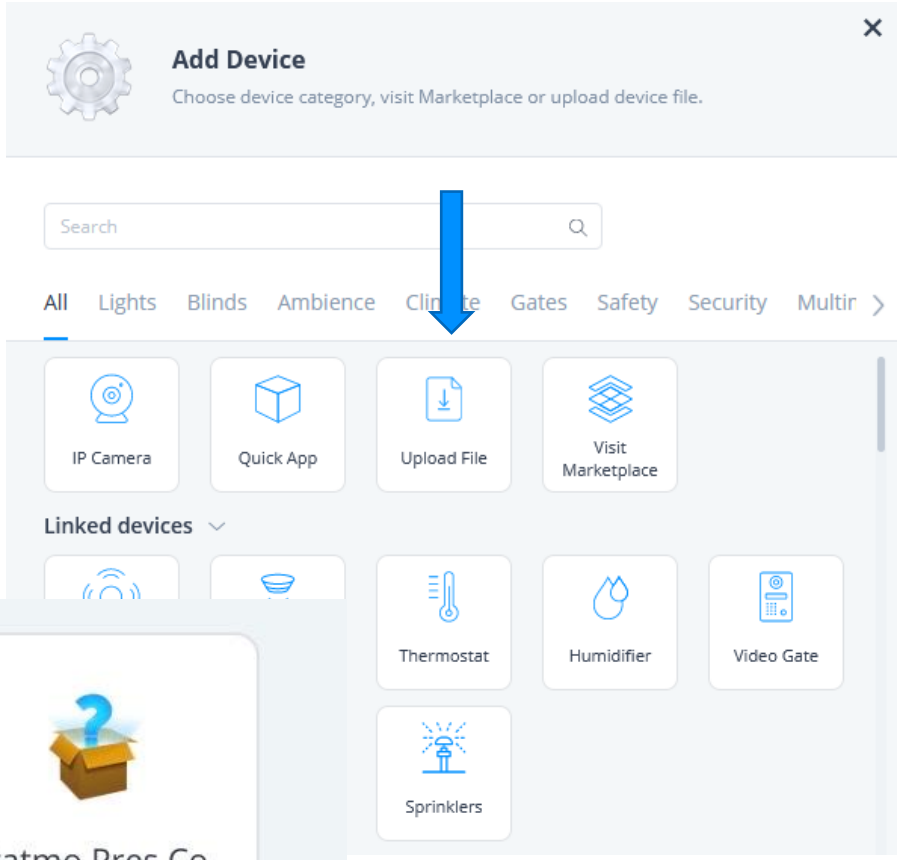


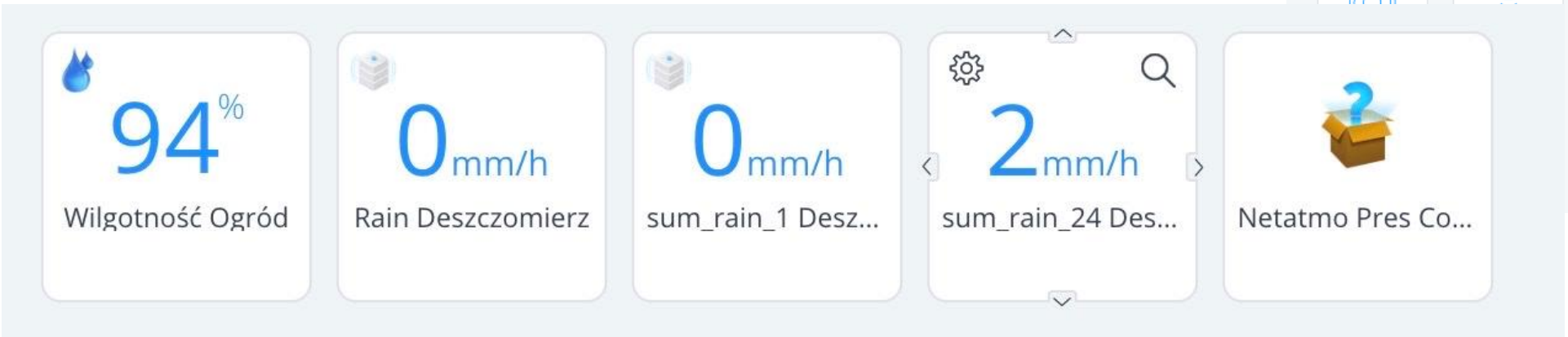




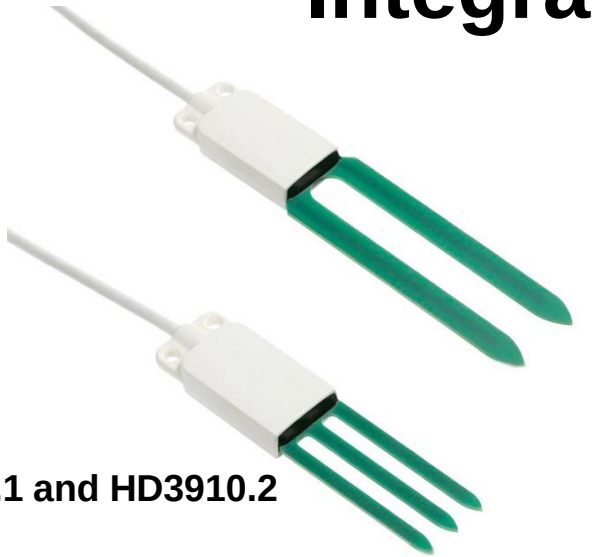
Integrations and sensors

Weather station Netatmo
https://marketplace.fibaro.com/





Integrations and soil moisture sensors



HD3910.1 and HD3910.2

Neufday

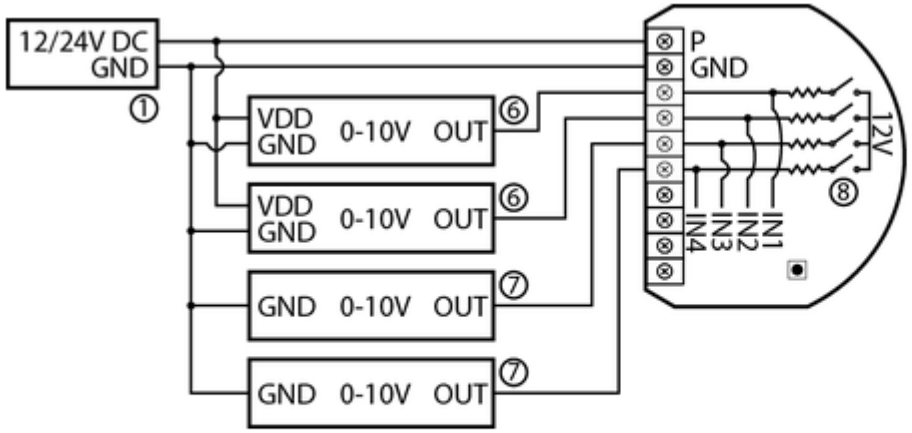
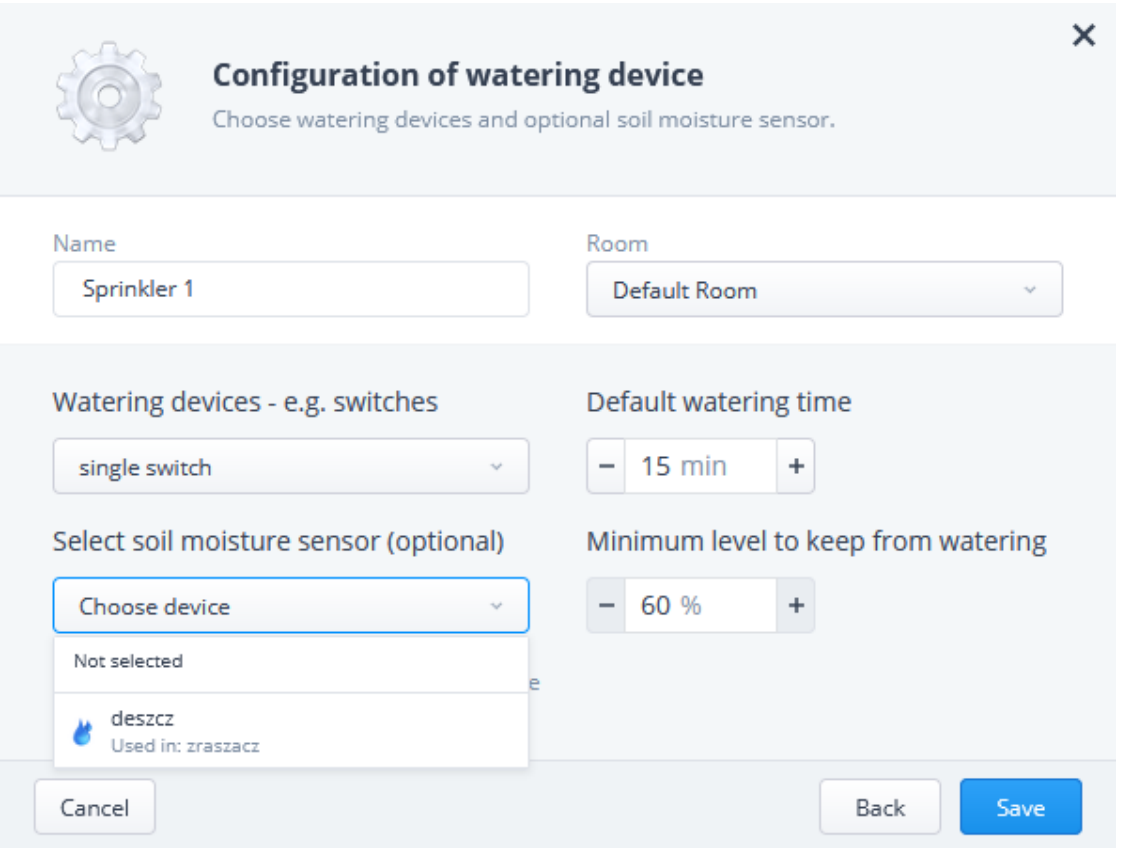
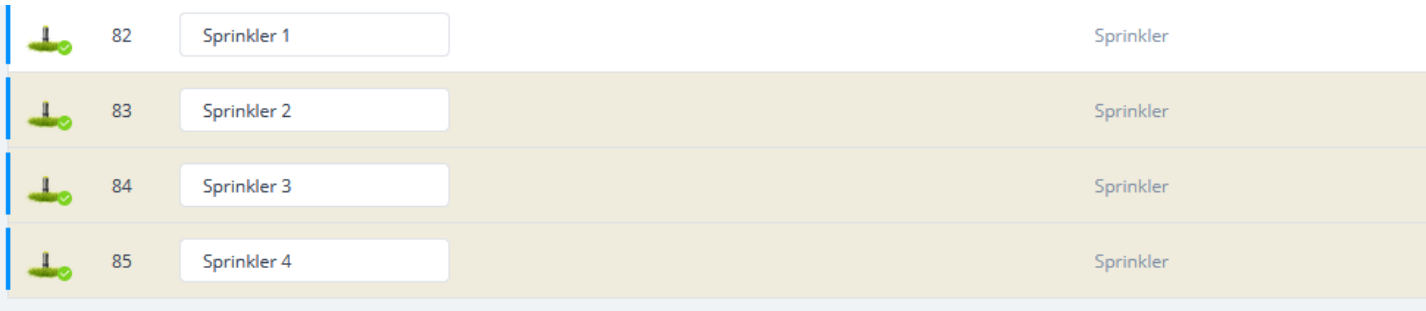


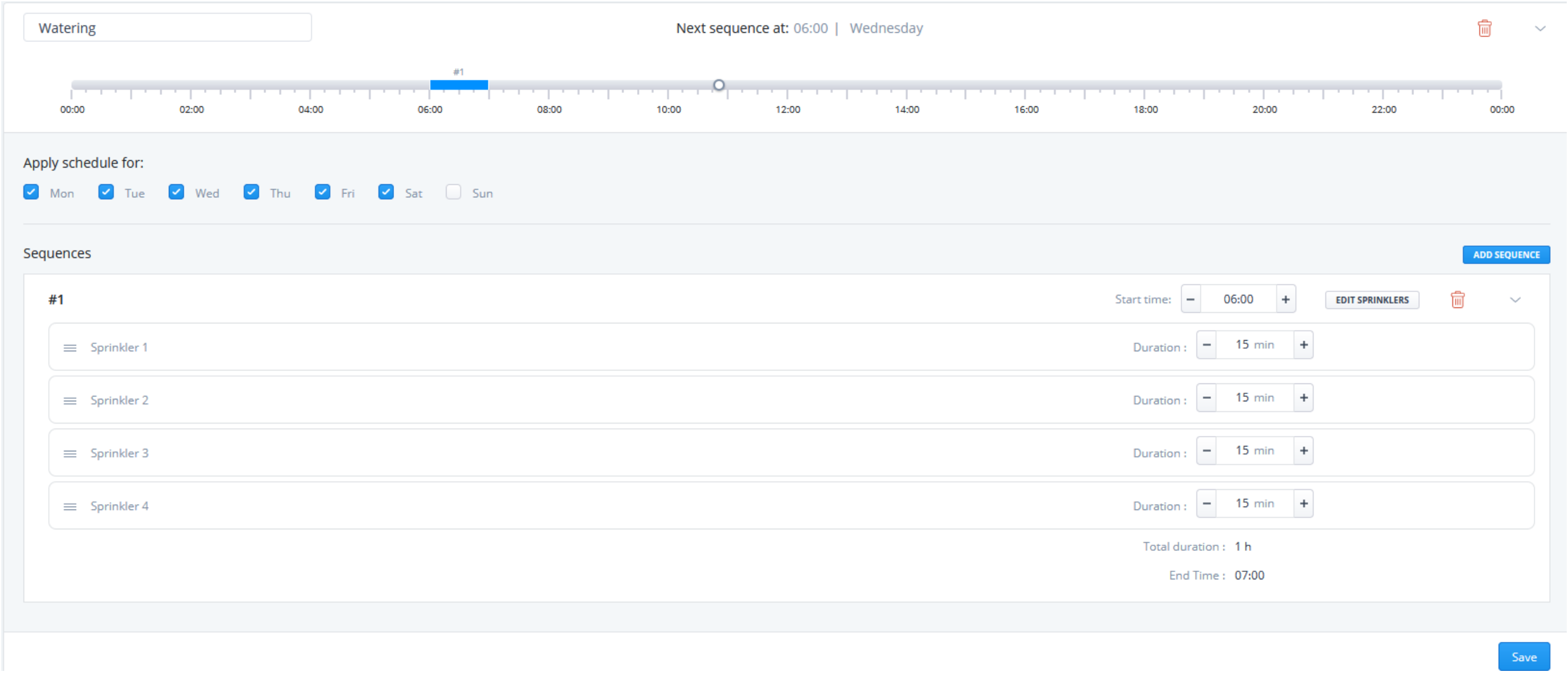
Diagram 5: Example connection with 4 0-10V analog sensors
(1 – power supply, 6 – 3-wire 0-10V analog sensor, 7 – 2-wire 0-10V analog sensor, 8 – configurable pull-up resistors)

Sprinklers

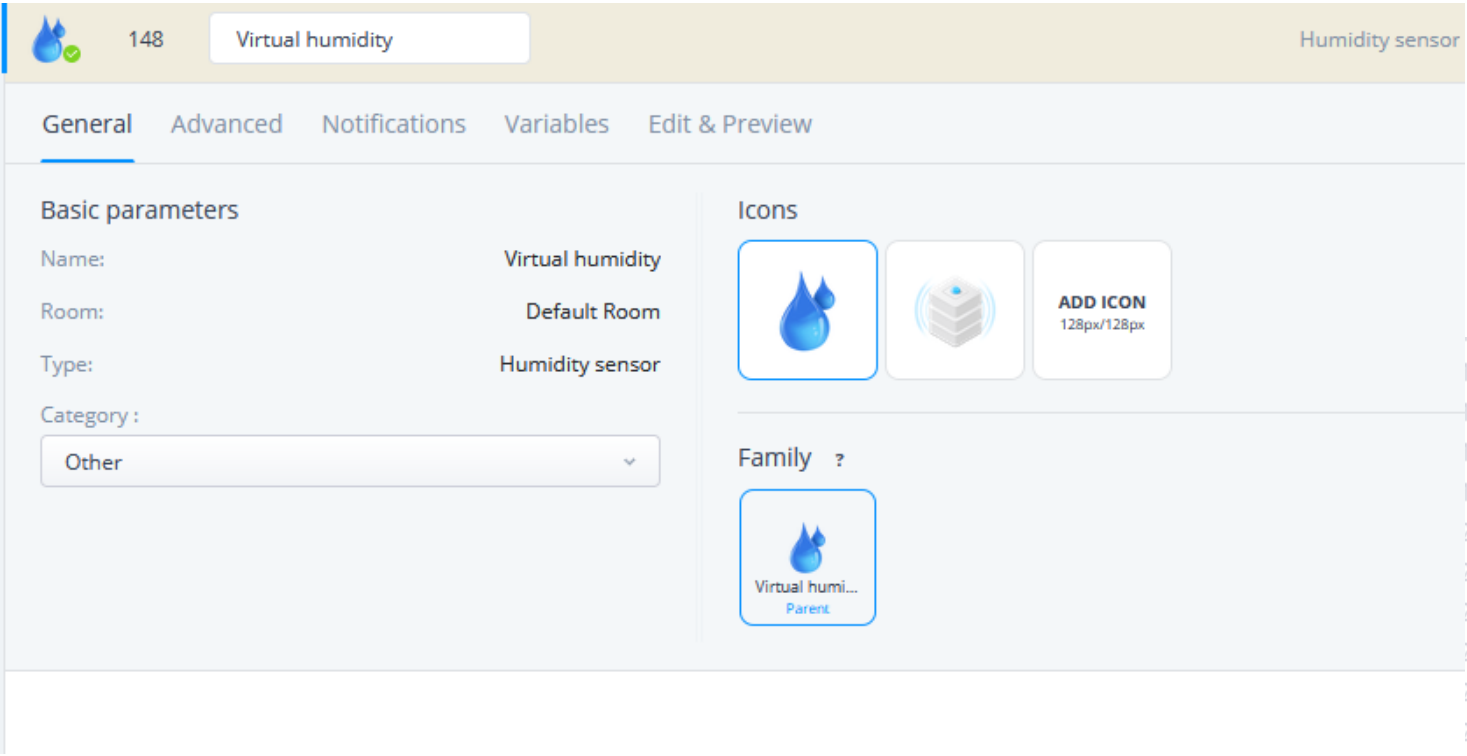

Configuration of watering device
Choose watering devices and optional soil moisture sensor.
Name
Sprinkler 1
Room
Default Room
Watering devices - e.g. switches
single switch
Default watering time
15 min
Select soil moisture sensor (optional)
Choose device
Minimum level to keep from watering
60 %
Not selected
deszcz
Used in: zraszacz
Cancel
Back
Save


82
Sprinkler 1
Sprinkler
83
Sprinkler 2
Sprinkler
84
Sprinkler 3
Sprinkler
85
Sprinkler 4
Sprinkler

Garden panel - sequences



Irrigation Quick App

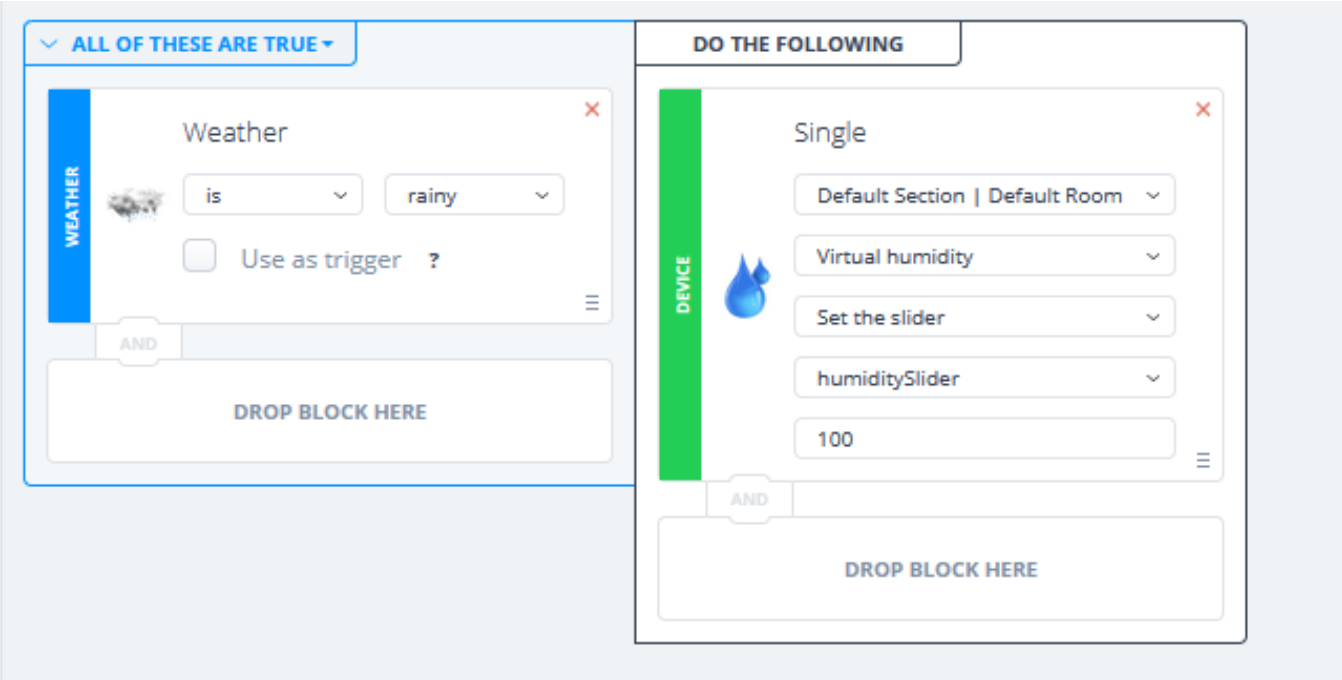


https://marketplace.fibaro.com/

```
function QuickApp:onInit()
    self:debug("onInit")
    local currentValue = hub.getValue(plugin.mainDeviceId, "value")
    self:updateView("humiditySlider", "value", tostring(currentValue))
end

function QuickApp:humiditySliderChanged(event)
    local newValue = event.values[1]
    self:debug('Slider changed: '..tostring(newValue))
    self:updateProperty("value", newValue)
    self:updateView("humiditySlider", "value", tostring(newValue))
end
```

Irrigation Quick App - scene



Scenes with irrigation

1. Stop irrigation if the total rainfall over the last 24 hours is higher than 4mm. Netatmo integration
2. If the weather is rainy, turn off the execution device
3. If I turn on the irrigation, turn on the pump.
4. Control the irrigation using Keyfob
5. Control the irrigation while the weather is rainy by setting the QA's humidity for 100%
6. If the water level in the rainwater tank is too low, use municipal water.

Thank you!

Nice FIBARO