

4.7. Irrigation Control

The irrigation control capability of Sensorweb™ can be utilized when irrigation control using nC24 nodes and control solenoids is desired. A detailed explanation of the two major ways to control irrigation in Sensorweb™ (local and global) is provided in a previous section in this module.

Click on “Irrigation” to go to the “Irrigation Scheduler” page where all nC24 nodes will be listed. Each of the nodes can then be independently configured to implement the desired irrigation control strategy (local control based on time or sensors and global control based on outputs from growing tools). For an irrigation to happen, the time window during which the desired irrigation strategy can be executed has to be selected as well. Specific time windows in Sensorweb™ can be selected by clicking on the start and end times represented by bars.

Figure 16 gives an example of local irrigation control based on soil moisture sensors. In this scenario, readings from selected soils moisture sensors (in this case all five) are averaged and compared to a threshold (set-point) value of 35% VWC (in this example). Irrigation is then applied whenever the average VWC drops below this set-point. The irrigation schedule shown in Figure 16 is executed only between 12pm and 6pm as this is the only time window selected.

Select Irrigation Node/Group: **B1_1** [Configure Irrigation Groups ?](#)

Select Irrigation Control Source: **Sensors on the Node**

Select which moisture sensor ports to use for control (selected sensors must be the same type and will be averaged together):
☒ Port 1 ☒ Port 2 ☒ Port 3 ☒ Port 4 ☒ Port 5

Low Setpoint (0-55%VWC): **35**

Pulse Type: **Pulse 1** [Edit pulse types here](#)

Click on start and end point to create (or delete) schedule below: [? Click here to view all schedules](#)

Timeline visualization showing irrigation events (vertical bars) and selected time windows (shaded areas). The selected time window is from **noon** to **6pm**. Other time markers include midnight, 3am, 3pm, and 6am.

Add an irrigation event at a specific time that will ALWAYS occur (set time to --:-- to disable): [?](#)
Time (hour/minute): -- : -- Length of irrigation event: **0** minutes (must be under 300 minutes).

[Update Controller](#) Maximum irrigation time per day is 0.41 hours

Figure 16. A local irrigation control setup based on soil moisture sensor