

# HUNTER SOLAR SYNC

## CLIMATE-SENSING IRRIGATION CONTROL

The Solar Sync shall automatically adjust run times for controller stations based on a local evapo-transpiration sensor, connected to a compatible automatic irrigation controller via SmartPort interface.

The Solar Sync shall include only local evapo-transpiration data, "local data" being defined as sensed climatological conditions within the immediate coverage area of the irrigation system, from a sensor dedicated to that purpose. The Solar Sync shall not require broadcast, subscription, or other generalized weather data, and shall function as a standalone ET-based irrigation system when directly connected to a compatible automatic irrigation controller of up to 48 stations.

The Solar Sync shall consist of two physical components, including a Solar Sync Sensor mounted in an optimum location for measurement of climatological data, and a module, containing database information which shall be connected to the irrigation controller's SmartPort.

The Solar Sync Sensor shall be mounted within 200 ft./60m of the irrigation controller. The Solar Sync Sensor shall include individual sensors for solar radiation, and air temperature, and shall also include a rain sensor. The rain sensor shall be capable of interrupting the power from the irrigation controller to the valves when rainfall exceeds a pre-selected amount.

The rain sensor circuitry shall utilize 2 sets of hygroscopic disks to activate switches in the unit. One switch will be for the total rainfall compensation unit and the other for the Quick Response™ unit. The Quick Response™ unit will turn off the irrigation system within 5 minutes of the onset of precipitation, depending on the intensity.

The sensor shall be adjustable by turning a plastic collar on the device that regulates an opening, thus varying the rate of evaporation from the disks.

In addition, the built-in temperature sensor shall be capable of interrupting the power from the irrigation controller to the valves when ambient air temperature falls below 37 degrees Fahrenheit (3 degrees Centigrade).

All sensors shall be integrated into a single array, and shall be housed in an UV and corrosion resistant plastic casing.

The sensor shall have an integral, adjustable, aluminum, mounting bracket that allows installation on angled, as well as perpendicular surfaces. The sensor shall have a mounting option that allows for installation on a rain gutter.

The Solar Sync shall permit the user to designate a no water window that prevents any irrigation from occurring during a specific period of the day.

The Solar Sync shall be fully functional with 24VAC input or less, with a max current draw of 25ma, and shall not require a dedicated high-voltage transformer or connection. The Solar Sync system shall be CE [C-tick] approved.

The Solar Sync shall be installed in accordance with the manufacturer's published instructions, and shall carry a conditional five-year exchange warranty. The Solar Sync shall be as manufactured for Hunter Industries Incorporated, San Marcos, California.