

### Rain/Snow Sensor Controller

- Reliable Rain And Snow Detection
- Field Strap for 100-120/200-240 VAC Operation
- Easy Installation, Full Access to Electronics
- Adjustable Temperature Trigger Point
- Bright Off/On/Triggered LED Status Indicator



- Automatic Activation means Lower Deicing Costs
- Full 30A @ 240VAC Control
- Replaceable Remote Precipitation Sensor
- Safe Low Voltage Sensor Head
- Adjustable Delay Off Cycle
- Smart "Manual On" Operates for One Delay Cycle

The **WS-8C** is primarily designed for gutter, downspout, and roof ice melting and small satellite antenna deicing. The totally sealed, low voltage, remote mount precipitation sensor allows the user to install the small sensor head in a downspout, the bottom of a gutter, or at the end of an antenna boom, up to 10' away, while keeping the main controller in a more convenient or protected location.

The unit is housed in a two gang PVC enclosure. The overall dimensions of the **WS-8C** are 4¾"(120) x 7"(178) x 2¾"(70). The unit weighs 2 pounds. The user may access all electronics by removing the four front cover screws.

Wiring is performed by terminating your existing wiring to the pre-installed pigtails (see below.) The **WS-8C** is mounted by either attaching the mounting hub to a rigid ½" or ¾" conduit or by installing screws through the four mounting tabs provided.

The **WS-8C** can be powered from either a 100-120 VAC or 200-240 VAC 50/60Hz source. Peak power consumption is 15 watts. Voltage selection is performed by installing provided jumpers onto the printed circuit board. The unit provides a single 240VAC @ 30A normally open load contact set. Operational temperature range is -40°C to +85°C.

An environmentally sealed control switch is provided. The "Manual On" function activates the controlled equipment for testing and special operational conditions. The "Automatic" position allows the **WS-8C** to handle all detections and control. The "Standby/Reset" position disables triggering and can also be used to clear the delay off timer (see below) from true or test activation. **If the switch is placed in "Manual On" for less than 2 seconds, then switched back to "Automatic" the controller will execute one delay off cycle.** The delay off cycle is determined by the DEL adjustment with a range of 30-90 minutes. This can be used to clear surfaces with a frost or hail buildup without the danger of leaving the system in a continuous "Manual On" condition. "Standby/Reset" can still be used to clear the delay off cycle. Remote control and monitor up to 1000 feet away is also available when the optional C/M cable listed is installed. The **WS-8C** is also compatible with the **DP-7B**, **DP-7EX**, and **WS-AUX** remote control/status panels.

"Delay Off" refers to the internal drying cycle timer of the **WS-8C**. The timer is used to allow the **WS-8C** to dry the heated surface through evaporation once precipitation has stopped. The drying cycle reduces the chance that moisture left behind by the melting process will refreeze into ice. This timer is restarted by each precipitation detection. Therefore, the **WS-8C** will continue to operate as long as precipitation and trigger temperature is detected, then for the "Delay Off" time once rain or snow stops. The Delay Off time can be adjusted from 30-90 minutes. Proper adjustment assures drying without excessive runtime.

Trigger Temperature is adjustable from 34°F-44°F using an on-board control. When ambient air temperature is below this trigger point precipitation is assumed to be snow or freezing rain. The **WS-8C** can be configured to detect snow only by leaving the thermal probe connected to J2. Removing the thermal probe connection allows the unit to trigger on either rain or snow detection.

The **WS-8C** also has an external LED indicator, providing a method to check proper power and trigger status when the unit is mounted in a "hard to reach" location. Steady OFF indicates no power to the unit. Steady ON indicates power but no trigger. A blinking LED indicates the **WS-8C** is triggered and deicing is taking place. —



WS-8C Specifications	
Dimensions	4¾"(120) x 7"(178) x 2¾"(70)
Weight	2 Lbs. (0.9 Kg)
Operating Temperature	-40°F to +185°F (-40°C to +85°C)
Enclosure Rating	NEMA 3R
Supply Power	100-120VAC/200-240VAC Field Selectable 15W maximum
Trigger Temperature	34°F-44°F (1.1°C-6.6°C) Field Selectable
Delay Off	30-90 Minutes Field Selectable
Load Contact Capacity	30A @ 240 VAC/100,000 operations minimum at full load