

Automatic Control and Power Distribution for Snow Melting & De-icing

## POWER 05 MODULATOR

## Features & Benefits

- > Integrated electronic controller with back lit LCD display
- Sequencing option between the zones, allowing for a larger snow-melting area with less available power on site
- > Multiple snow sensor inputs (optional)
- > Up to 50A & 600V outputs to heaters
- > Integrated adjustable Ground Fault Sensor
- > Adjustable set points
- > Adjustable upper and lower limit temperature
- > Adjustable Hold On-OFF delay and manual On
- > Adjustable splitting time between the zones
- Technician testing/commissioning mode for easy and fast system testing all year long (even during summer or at high temperatures)

> ETL certification



**Power Modulator 5** 

Energy Efficient Algorithm





User-friendly Interface

Activate up to 5 Zones





## About the Power Modulator 5

The outdoor temperature set point as well as ground upper limit temperature and ambient lower limit temperature can be easily set.

The Technician Settings mode allows the installer or technician to adjust the parameters for customized installations.

The Power Modulator 5 is a "plug and play" controlled power distribution panel for frost protection, ice and snow melting applications.

When receiving a signal from the snow sensors, it activates the contactors, energizing the heating elements.

Based on the DIP switches configuration, the zones are activated either continuously or with customized sequencing between the zones.

The Hold-On (time delay) is adjustable in the range of 0 to 99 hours.

The Power Modulator 5 built-in Ground Fault Sensor allows settings for the tripping current between 10 – 100 mA.

The GFCI adjustable time delay provides simple and safe protection from nuisance tripping.

### The parameters that can be modified are as follows:

- > Temperature set point
- > Lower ambient temperature limit
- Slab upper temperature limit to deactivate heaters for energy efficiency
- Time delay (Hold-on) before deactivating the heaters
- > ON time for Manual mode

- > Heaters cycle time/splitting time between zones
- Number of zones and sequence of operation (sensors and heaters control logic)
- Snow sensor RH sensitivity
- > Number of snow sensors connected

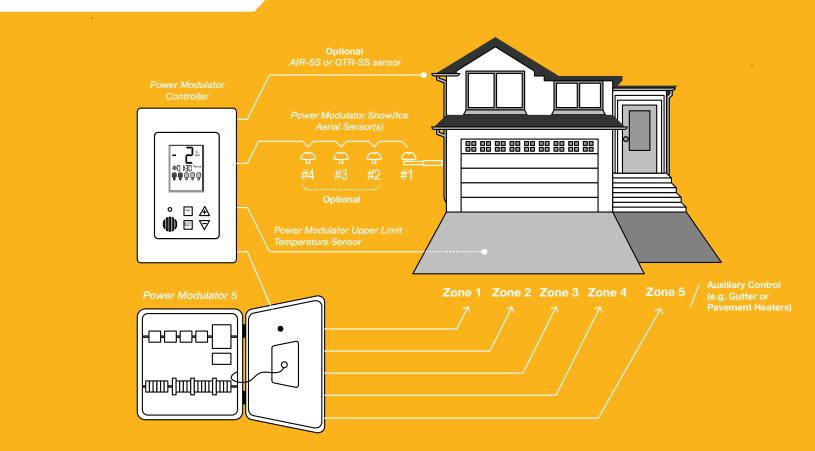
- DIP switches located on the controllers provide easy access to Technician mode and to the system configuration settings.
- A 5th output (300 VAC, 30A Double Pole) can be used as a stand-alone ice-melting zone or be activated simultaneously with zone #4. Zone #5 offers a simple option for gutter or roof and gutter deicing zone.
- The Power Modulator 5 allows snow sensor input both from the Power Modulator Snow/Ice Aerial Sensors sensors and also from an AIR-SS aerial mounted snow sensor or GTR-SS gutter mounted ice sensor.
- Installing the system is a quick and easy task. Apart of mounting the metal box to the wall, the installer needs only to connect the line-in and line-out wires in the marked terminals, and the system is ready to work.

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**General System Layout** 

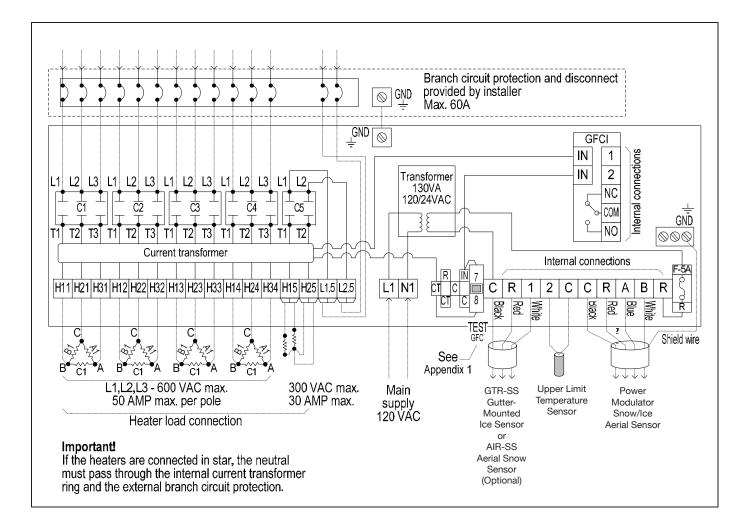


### **Technical Specifications**

Approvals	ETL Listed CAN/CSA-C22.2 No. 14   UL-508A	Manual Reset GFS	Push button on front panel
Enclosure Protection	IP20, Indoor Mounting	Four Satellite Contactors	600 VAC, 50 A Max (Resistive), 50/60 Hz, 3-Poles
Dimensions	19 3/4 x 19 3/4 x 8 1/2 inch (50 x 50 x 22 cm)	One Satellite Contactor	300 VAC, 30 A Max (Resis- tive), 50/60 Hz, 2-Poles 300 VAC / 30 A per pole
Ground Fault Equipment Protection	Adjustable triping current 10-100 mA (default 30mA)	Terminal Blocks	6 mm², 10 AWG (max)
GFCI	Adjustable time delay 0.1-1 sec. (default 0.1 sec.)		



Wiring Diagram



#### Need assistance?

For more information, operating and technical manuals, please refer to www.warmlyyours.com. \*Product specifications are subject to change. ND