



Precipitation Detector Model 6420-A



Overview

The Model 6420-A Precipitation Detector indicates the onset of most precipitation types by continuously monitoring the conductivity between two sections of a gold-plated grid. The rain water increases the conductivity of the grid and is detected by the circuitry which closes the output relay. This relay closure can be used to sound alarms, close doors, or input to a data acquisition system.

The sensor grid contains two

heating elements that help evaporate the remaining water once the precipitation has ended. Then the water evaporates, the conductivity of the grid decreases and the relay opens.

Heaters

The heaters operate continuously and dissipate about 10 watts of power. They keep the sensor grid approximately 20°C above the ambient temperature, so that ice precipitation that collects will melt and be detected. The heaters also prevent the condensation

of moisture on the grid, which might be incorrectly recorded as a precipitation event.

Design

All electronics are solid-state, and are sealed in a weatherproof enclosure. The sensor is oriented on an angle to allow water to drain off. A wind screen conserves sensor heat and thus reduces power consumption. AC power is required. Two U-bolts are included for easy mounting of the 6420-A.

SPECIFICATIONS

Parameter	Specification
Sensor Type	Gold-Plated Grid
Sensor Size	3.5" Diameter (89 mm)
Output	Relay Closure
Relay Rating	0.5 amps
Heaters	2, cartridge
Input Voltage	115/230 Vac, 50/60 Hz
Power	10 W

ORDERING INFORMATION

Part Number	Description
6420-A	Precipitation Detector

DIMENSIONS & WEIGHTS

Product Dimensions	9.4" x 9" x 5.5" (239 x 229 x 140 mm)
Product Weight	5.2 lbs (2.4 kg)
Shipping Dimensions	10" x 10" x 10" (254 x 254 x 254 mm)
Shipping Weight	8 lbs (3.6 kg)



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