

# 5500 Moisture Detection Series Installation Instructions

## Introduction

The 5500 Moisture Detection Series is designed to respond to the presence of water and other nonflammable conductive liquids. It is connected in the closed loop of an alarm system. You can use up to four surface-mount 5515 sensors with the 5501 moisture processor.

You can use the processor with any closed loop control panel, dialer, or wireless transmitter input circuit. The processor comes with internal lithium batteries with an anticipated life of 10 to 15 years. The processor provides flexibility in mounting with no need for an external power source and minimal required wiring.

## Operation

A time delay circuit is provided to reduce the chance of false alarms. The processor requires the presence of moisture for ten seconds before going into alarm mode. It will stay in alarm mode until the moisture is removed from the sensor. When tripped, the LED will flash at two-second intervals until the sensor is dry. Optical coupling between sensor input and processor output circuits provides isolation from ground.

## Installation

To install the series, do the following:

1. Insert a small, flat-bladed screwdriver in the slot at the top or bottom of the processor and pry the cover off the base.
2. Mount the processor using the mounting holes shown in Figure 1 below.
3. Mount the 5515 sensors to any surface and in any position, using screws or double-sided tape.

## Wiring

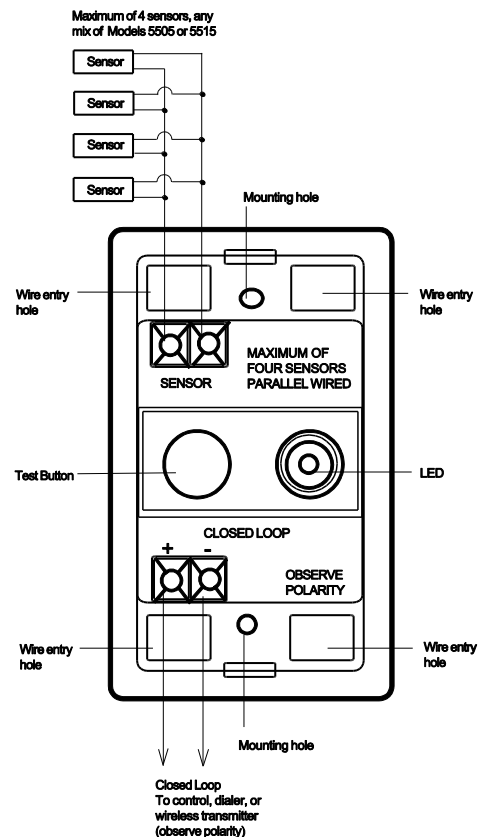
Wire the sensors in parallel (Figure 1 below). You do not need to observe polarity. The connection for output on the processor, however, is polarity sensitive. Trigger the processor and allow the control panel, dialer, or transmitter to operate to verify the connection.

## Testing

Press the test button (Figure 1 below) for 15 seconds to simulate the presence of water and activate the processor (the

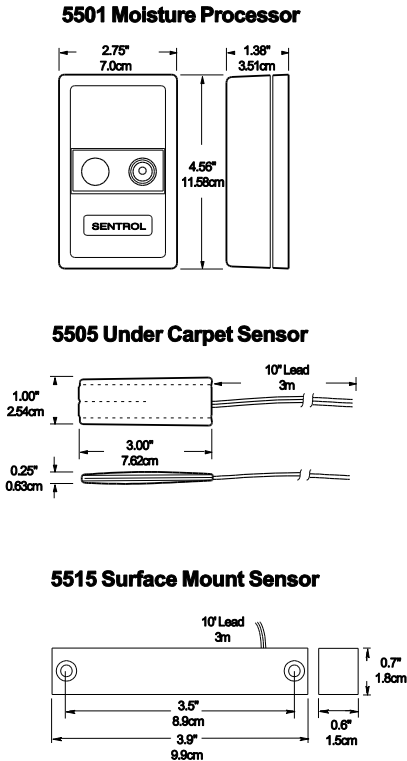
LED will flash). Release the button to restore the processor to normal operation.

Figure 1: 5500 moisture detection series



## Dimensions

Figure 2: Dimensions



## Specifications

Loop type	Closed
Battery type	Lithium
Battery life	Approximately 10 to 15 years
Alarm response	10 seconds delay, then on as long as wet
Test button	Simulates moisture for test
LED	Flashes every 2 seconds on alarm
Trigger response	500 kΩ
Sensor isolation from ground	Photo coupled
Sensing circuit	AC to eliminate electrolysis (1 Hz)
Cable Length	100 ft. (30 m) maximum
Loop resistance	10 Ω maximum (nonalarm) 1 MΩ minimum (alarm)
Operating temperature:	
5501 processor	0 to +125°F (-17 to +51°C)
5515 sensors	+33 to 180°F (0 to +82°C)
Number of sensors per processor	4 max.

## Ordering information

Model	Description	Loop type	Color	Lead
5501	Moisture processor	Closed	Mahogany brown	Terminals
5515	Surface-mount sensor	NA	Gray	10 ft. (3 m)

## Regulatory information

**Manufacturer** PLACED ON THE MARKET BY:  
Carrier Fire & Security Americas Corporation Inc.  
13995 Pasteur Blvd  
Palm Beach Gardens, FL 33418, USA

**AUTHORIZED EU REPRESENTATIVE:**  
Carrier Fire & Security B.V.  
Kelvinstraat 7, 6003 DH Weert, Netherlands

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