



A70H-RS

Rain and Snow Sensor

Instruction Manual



Pictured:
A70H-RS



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The A70H-RS Rain and Snow sensor provides qualitative detection of rain or snow. The unit automatically heats to melt snow on the sensing surface. It is designed to provide control of automated windows, wipers, and snow melting systems. The ring conductor senses rain or snow on the surface and generates an output switch signal. Standard configuration is a normally open (NO) relay and/or RS485.

FEATURES

- Automatic heating of surface to melt precipitation
- Both NO Relay and RS485 connectivity

APPLICATIONS

- Building Automation and Controls
- Walkway monitoring/heating control
- Automatic de-icing control

SPECIFICATIONS

- Supply Voltage: 12-24 VDC
Output: Relay, Normally Open and/or RS485
Heating Power: 10 W
Relay Load Capacity: AC - 120V / 2A
DC - 24V / 2A
Ingress Protection: IP67
Operating Temperature: -30°C to 70°C
Weight: 150g
Shell Material: ABS
Storage Conditions: 10°C to 60°C @ 20% to 90% R.H.

ELECTRICAL CONNECTIONS

CABLE	Connection
RED	V+
BLACK	V-
WHITE	RELAY SIDE 1
BROWN	RELAY SIDE 2
YELLOW	RS485A
GREEN	RS485B

*(NO POLARITY)

* No Polarity Requirement for Relay Output



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MODBUS COMMUNICATION PROTOCOL

Transmission Mode: MODBUS-RTU, Baud rate: 9600bps, Data bits:8, Stop bit:1, Check bit: no

Slave address: the factory default is 01H (Set according to your need, 00H to FFH)

- The 03H Function Code Example: Read the Rain or Snow

Host Scan Order (slaveaddress:0x01)

01 03 00 00 00 01 840A

Slave Response

01 03 02 00 0A 3843

(000A)H>> rain or snow

- The 06H Function Code Example: Modify the slave address

Host Scan Order (Changed the 01H to 02H)

01 06 00 00 06 080B

Slave Response:

01 06 00 00 00 02 080B

If you forget the original address, you should use the broadcast address(FEH) (ensure that no other devices are on the bus at this time)

MOUNTING AND MAINTENANCE:

Mount the sensor at a 15 degree angle with the cable exiting the upper end of the sensor.

The sensor should be mounted at a 15-degree angle off the horizontal so the sensing surface will gently slope down and allow moisture to run off and not sit on top. It is not recommended to be embedded in concrete or pavement as that would make it difficult to service should the need ever arise. Likewise, it must be located so it is not subject to any sort of traffic (pedestrian, bicycles, cars, etc.) that would damage the sensing surface.

Specifications subject to change without notice.

Installation Questions and Troubleshooting

Contact sales@comptus.com

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