

Model 5428 RWIS Snow Depth Sensor

■ Ultrasonic Technology

■ 1.6 to 32.8 ft (0.5 to 10 m)
Range



■ Analog Interface

PHONE: (800) 275-2080

HIGH SIERRA ELECTRONICS, INC.

FAX: (530) 273-2089



DESCRIPTION:

The Model 5428 RWIS Snow Depth Sensor is an ideal solution for remotely monitoring snow depth or water levels. The sensor works by measuring the time required for an ultrasonic pulse to travel to/from a target surface. An integrated temperature probe with solar radiation shield, provides an air temperature measurement for properly compensating the distance measured. An embedded microcontroller calculates a temperature compensated distance and performs an error checking routine.

Both distance and air temperature measurement are output as a analog signal between 0 to 2.5 V or 0 to 5 V.

SPECIFICATIONS:

Snow Depth

Range	1.6 to 32.8 ft (0.5 to 10 m)
Accuracy	± 0.39 in (1 cm) or 0.4% distance to target
Resolution.....	0.12 in (3 mm)

Temperature

Range	-40° to 185° F (-40° to 85° C)
Accuracy.....	1.8° F (1° C)
Resolution.....	0.9° F (0.5° C)

Analog Output	0 to 2.5 VDC or 0 to 5 VDC
---------------------	----------------------------

Digital Output	1200 baud serial ASCII
----------------------	------------------------

Beam-width.....	22 degrees
-----------------	------------

Operating Voltage	12 to 24 VDC
-------------------------	--------------

Current Draw	50 mA (maximum sample time 2.4 seconds)
--------------------	---

Operating Temperature	-40° to 158° F (-40° to 70° C)
-----------------------------	--------------------------------

Cable	25 ft (7.6 m)
-------------	---------------

Max Cable Length	1000 ft (304 m) for analog output, 250 ft (76 m) for digital output
------------------------	---

Mounting.....	0.5 in (1.27 m) galvanized threaded pipe
---------------	--

Dimensions	3 x 3 x 5 in (8 x 8 x 13 cm)
------------------	------------------------------

Weight	1.3 lbs (0.6 kg)
--------------	------------------

ORDERING GUIDE:

Model 5428-00.....	Ultrasonic Snow Depth Sensor with 25 ft (7.6 m) Signal Cable
--------------------	--

02-5428-00(B)

Environmental Monitoring Solutions

WEB SITE: www.highsierraelectronics.com E-MAIL: sales@highsierraelectronics.com