260-700 Ultrasonic Snow Depth Sensor

The 260-700 Ultrasonic Snow Depth Sensor is an inexpensive solution for remotely measuring snow depth or water levels. The sensor works by measuring the time required for an ultrasonic pulse to travel to and 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 are output as an analog signal between 0 to 2.5 Volts or 0 to 5 Volts. Measurements can also be output digitally as serial ASCII. Specify analog or digital output at time of order.

Due to the simplified interface, the depth sensor can interface with any data logger or control system that can delay at least 3 seconds after powering up before measuring the output.

Specifications

**Power:** +12 to 24 Vdc, 50 mA (maximum sample time 2.4 seconds)
**Analog output:** 0 to 2.5 or 0 to 5 Vdc
**Digital output:** 1200 baud serial ASCII
**Range:** .5 to 10 meters (1.6 to 32.8 feet)
**Beam width:** 22 degrees
**Accuracy:** ± 1 cm or .4% distance to target
**Resolution:** 3 mm (0.12 inches)
**Temperature range:** -40° to +70°C (-40° to 158°F)
**Mounting:** 1/2” galvanized threaded pipe
**Size:** 8 x 8 x 13 cm (3 x 3 x 5 inches)
**Weight:** 6 kg (1.3 lbs)
**Cable length:** 7.6 meters (25 feet)
**Maximum cable length:** 304 meters (1000 feet) for analog output, 76 meters (250 feet) for digital output

**Temperature Sensor**
**Accuracy:** 1°C (-40° to +85° C)
**Resolution:** .5°C

Ordering Information

260-700 Ultrasonic Snow Depth Sensor, specify 0-2.5 or 0-5 Vdc output, includes 25’ cable
260-700-D Ultrasonic Snow Depth Sensor, digital output, includes 25’ cable
260-700-C Additional Signal Cable, per foot
270-700-TM Horizontal Mounting Pipe, 5’ long with pole mounting bracket