

Precipitation



Model 54000
SNOdar Snow Depth Sensor

YOUNG Model 54000 SNOdar Snow Depth Sensor

The SNOdar is a highly accurate, reliable snow depth sensor designed to deliver real-time data—even in the middle of a snowstorm. Its mobile app makes setup effortless while providing instant access to live snow depth measurements from anywhere in the world.

SNOdar is one of the only snow depth sensors that utilizes LIDAR (Light Detection and Ranging) technology to provide accurate snow depth measurements. This high-precision method allows the SNOdar to create detailed, real-time snow depth data, ensuring reliable and efficient snow monitoring for a variety of applications.



The SNOdar can output data via RS-232 or SDI-12 to a range of commercially available data loggers. It also features an internal, non-volatile data logger capable of storing an entire season's worth of data, eliminating the need for separate data loggers for each sensor—resulting in significant cost savings during deployment. Its compact, lightweight design is built to withstand frigid temperatures while consuming very little energy.

Specifications

Durability

Input Voltage: 6 - 24 Volts
Operating Temperature: -40 - 60°C
Storage Temperature: -40 - 85°C
Mechanical Vibration: 20G
Mechanical Shock: 500G
Ingress Protection: IP67
Corrosion Resistance: Type III: MIL-A-86

Measurements

Accuracy: +/- 1 - +/- 2cm
Resolution: 0.2 - 0.5cm
Range: 0.10 - 10m
Measurement Interval: 1 - 60 mins

Power Usage

Current Consumption: 0.04 - 0.27 amps
Power Consumption: 0.48 - 3.24 watts
Avg Power Consumption: 0.5 watts

Dimensions

Weight: 380 grams
Size: 6.4 x 6.4 x 10.2cm

ESD Ratings

Human-Body Model: +/- 2500V
Charged-Device Model: +/- 1000V

Applications

- SNOTEL Snow Monitoring
- Stormboard Snow Measurement
- Avalanche Monitoring & Forecasting
- DOT Road Conditions
- Ski Resort Snow Monitoring
- Scientific Snow Monitoring

Ordering Information

SNOdar Snow Depth Sensor 54000
SNOdar Snow Depth Sensor 54200
with SWE (Snow Water Equivalent)

CE Complies with applicable CE directives.

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Features

- Real-time, accurate data during storms
- User-friendly app for setup and live data
- Bluetooth Low Energy (BLE) enabled
- Seasonal internal data logger
- Snow depth (compaction)
- New snowfall
- Seasonal snowfall
- Optional estimated SWE (Snow Water Equivalent)
- SDI-12 data logger & RS-232 output
- Sensor orientation monitoring
- Oblique or normal angle mounting on tower



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