



Innovative technology

Non-contact measurement of Snow Water Equivalent (SWE)

Overview

The CS725 measures snow water equivalent (SWE) by passively detecting the change in naturally occurring electromagnetic energy from the ground after it passes through snow cover. The measurement area of the CS725 is 50 to 100 m², an excellent replacement sensor for the traditional snow pillow and snow scale.

The sensor is powered using 12 Vdc and can either operate in a stand-alone mode, or be easily interfaced to a datalogger. With the addition of a wireless communication option, SWE values can be transmitted in real-time from remote sites.

Benefits and Features

- › Does not cause the melt of light snow (as with a snow pillow)
- › Greatly reduces need for site visits
- › Not affected by snow bridging
- › No site preparation or earthworks required for set-up
- › 5 to 10 times the measurement area of the nearest competitor
- › No fencing required (typically mounted 3 m above surface)
- › Will not cause snow drifting
- › Seven years maintenance free
- › No antifreeze chemicals used (i.e. glycol)



Ordering Information

Snow Water Equivalency Sensor

CS725 CSC Snow Equivalency Sensor (requires CS725CBL-L)

Cable

CS725CBL-L CS725 Power & Signal Cable with user-specified length. Enter cable length, in feet, after the -L. A cable termination option is required (see below).

Cable Termination Options (choose one)

- PT** Cable terminates in pigtails for direct connection to data-logger's terminals.
- PW** Cable terminates in a connector for attachment to a prewired enclosure.

Accessories

- 27412** CS725 Mounting Kit
- 27413** CS725 Right Angle Mounting Kit
- 29390** CS725 Collimator Assembly. Includes mounting safety strap and carrying strap.

Specifications

- › Measurement Range: 600 mm maximum water equivalent
- › Accuracy:
 - ±15 mm from 0 to 300 mm
 - ±15% from 300 to 600 mm
- › Resolution: 1 mm
- › Coverage Beam Angle: 60°
- › Operating Temperature: -40° to +40°C
- › Power Requirements: 11 to 15 Vdc
- › Power Consumption: 180 mA
- › Output format: RS-232 (1200 to 115200 bps)
- › Maximum Cable Length: 30 m
- › Cable Type: four conductor, two-twisted pair, 22 AWG, Santoprene jacket



Dimensions

- › Length: 62 cm
- › Diameter: 12.7 cm

Weight

- › Main body: 9 kg (20 lb)
- › Collimator (accessory): 25 kg (55 lb)
- › Total: 34 kg (75 lb)