



Rugged construction

Digital temperature measurements

More info: 780.454.2505

campbellsci.ca/cs225

Overview

The CS225 temperature string uses SDI-12 digital technology for simple integration and reliability. The CS225 consists of an arrangement of temperature sensors mounted in rugged steel reinforced cable. Temperature points are overmolded to provide long-term protection in all mediums. Each CS225 is manufactured to the client's specific requirements.

The CS225 is suited for a wide variety of applications and environments that require temperature profiling. The completely sealed cable assembly permits the CS225 to be buried, submerged

or integrated directly into structures. Examples of some applications include temperature profiling in boreholes, soils, water, frost and permafrost monitoring. Suitable for freshwater and saltwater applications.

There is an optional 1 Kg stainless steel weight kit available for the CS225. The weight kit is designed for use in water profiling or borehole applications.

Benefits and Features

- › Customizable measurement spacing to suit any number of applications
- › One SDI-12 channel is used to connect all temperature sensors
- › Low Power – suitable for remote applications
- › No calibration required
- › Serial number & installation depth data for each location stored onboard each sensor
- › Excellent long-term stability of measurements
- › Made with steel reinforced polyurethane cable for added strength and durability
- › SGB3 protects against electrical surge damage
- › Optional 1 Kg weight kit available

Specifications

- › Operating range: -55°C to $+85^{\circ}\text{C}$
- › Accuracy (includes lifetime drift)
 - o Typical: $\pm 0.2^{\circ}\text{C}$ (-40°C to $+85^{\circ}\text{C}$)
 - o Worst case: $\pm 0.5^{\circ}\text{C}$ (-55°C to $+85^{\circ}\text{C}$)
- › Resolution: 0.0078°C
- › Maximum Pressure: 150 PSI
- › Communications: SDI-12
- › Temperature Point Diameter: 2.22cm (0.875 in)
- › Maximum cable length: 152 m (500 ft)
- › Maximum sensors per probe: 36
- › Minimum spacing: 15 cm (5.9 in)
- › Supply voltage: 9 to 28 Vdc
- › Current consumption:
 - o Quiescent current draw per sensor: 1.0 mA (max)
 - o Active current draw: 20 mA + (# sensors * 1.0 mA)
- › Warm up time on power up: 10 seconds
- › Lifetime min/max temperature recording
- › User resettable min/max temperature recording
- › Automatic 1 second temperature update