

Calibration Module

Product Data Sheet



Optional Calibration Accessory for the DTS 5100



Overview

SensorTran's proprietary Self-Calibration Unit (SCU) is revolutionizing the deployment and use of DTS systems.

The SCU creates a unique thermal profile with high and low temperature reference points which the DTS unit automatically recognizes as being generated by the SCU. The DTS unit uses these temperature reference points for accuracy verification and self-calibration of the DTS.

Features

The temperature set-points are programmable by connection to a laptop PC or similar device via the RS232 interface.

The SCU contains heating and cooling elements controlled by thermocouples. These elements locally heat or cool coiled optical fiber which is either part of, or connected in-line to, the fiber probes.

A switch allows the operator to switch the unit on/off if continuous operation is not required.

Lights on the SCU indicate that the SCU is operating correctly and is achieving the required temperature.

The SCU is designed for use in hazardous areas.

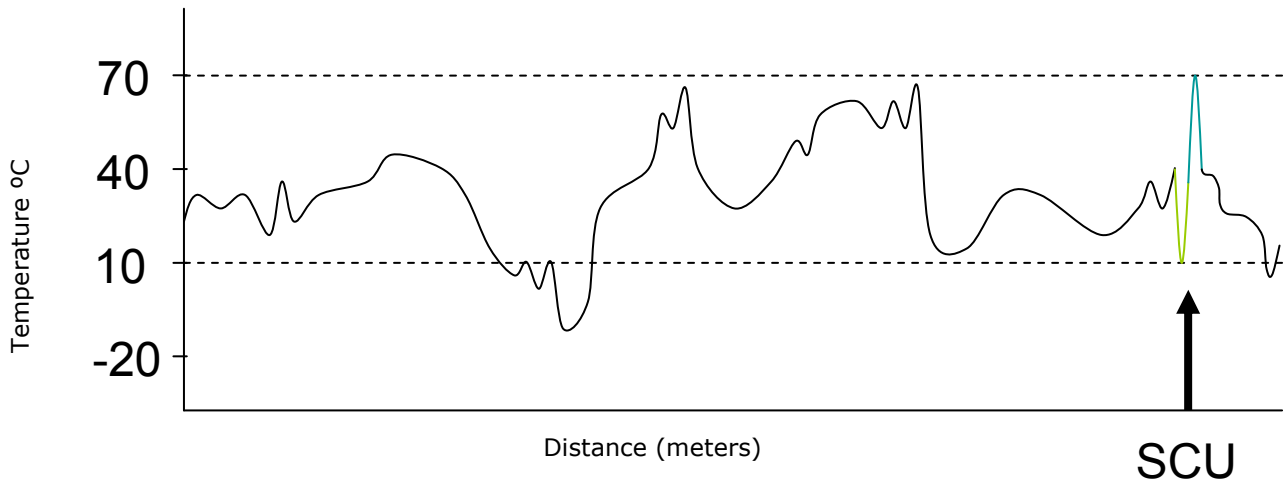
Continuous DTS Verification & Auto Calibration

Hot Spot Simulation

The SCU is also ideal to simulate a hot spot along fiber probes. Small high temperature hot spots can be generated to allow verification that the DTS unit is accurately measuring and alarming these simulated temperature events.

Temperature Trace

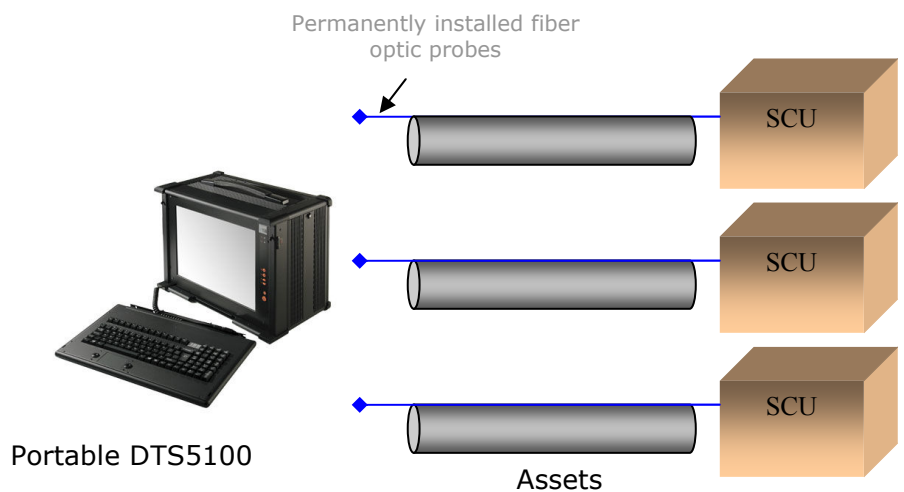
The Model 5100 identifies the SCU and its location using a unique thermal profile



Use of SCUs with Portable DTS Systems

Until the launch of the SCU, asset monitoring with portable DTS systems had an inherent problem...the DTS unit had to be re-calibrated every time it was connected to a new probe.

The SCU revolutionizes non-permanent multiple asset monitoring where each fiber optic probe is connected in-line with a permanent SCU. Each SCU provides automated self-calibration of the associated probe when the DTS unit is connected to it. A typical example is shown at right.



SensorTran has made every effort to ensure information contained in this document is accurate at the time of printing, however, product specifications and features are subject to change without notice.

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