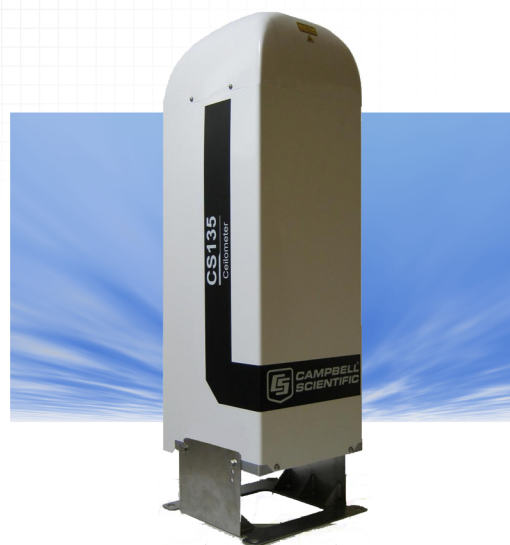


## Display software for the CS135

Clear, configurable display of CS135 data



## Overview

Viewpoint is data visualisation software for the Campbell Scientific CS135 ceilometer. It allows the user to display data from one or more CS135s in a clear and versatile manner.

Various display charts are available and may be displayed individually or together. All charts are accompanied by a side panel with instantaneous values along with sky condition in oktas, METAR abbreviations and standard symbols. The scales on all axes can be configured and data for up to 24 hours can be displayed. Height units can be in feet or metres.

A status screen shows any status information received from a sensor. Individual status messages are colour coded according to their rated severity.

A Live Data screen shows the data messages being received and a Terminal screen allows direct control of a device and to send commands manually.

An extensive operating guide and help feature is built in.

Campbell Viewpoint can be used for 100 hours in trial mode before it needs to be activated with a key purchased from Campbell Scientific.

## Benefits and Features

- › Clear, simple, at a glance information on cloud parameters
- › Configurable to match customer needs, shows what you need as you want to view it

## Detailed chart options

The backscatter profile and scatter intensity charts display information on the scattering from different levels in the atmosphere. They show the amount of scattering within each 5m interval. The Scatter Intensity plot shows the variation over time using a system of contours and colour coding. Different colours represent different scatter intensities. The colour thresholds are configurable so that, for example, a higher resolution at lower values can be set to show detailed structure in aerosol scattering.

The cloud detection chart shows the height of detected cloud layers and/or vertical visibility over time. If the CS135 has the Mixing Layer Height (MLH) option activated Viewpoint can display up to three layers.

The Mixing Layer is defined as that part of the boundary layer within which the air is well mixed but contained vertically, often by a temperature inversion. MLH is an important

parameter in air quality forecasting because pollution is trapped below the mixing layer. MLH is an optional extra for the CS135 and will only be available when this feature is enabled. When enabled the mixing layers are displayed in the instantaneous summary panel and cloud detection chart. For more information on enabling this feature please contact Campbell Scientific.

Sky condition is an assessment of cloud cover measured in units of eighths or 'oktas'. The number of oktas is the density of cloud in eighths of that layer. Up to five layers can be displayed. Note that sky condition assessment is based on cloud data for the previous 30 minutes and is not an instantaneous measurement.

## Specifications

### Hardware communication requirements

- › Campbell Viewpoint can connect to supported sensors either via Direct Serial connection or via Serial over Ethernet. Multiple devices are supported on multi-drop connections if they are uniquely addressed and utilising the same connection settings.

### Minimum system requirements

- › Processor 1 GHz
- › RAM 1 GB
- › Operating System Microsoft® Windows Vista® Service Pack 2 or higher
- › Screen Resolution 1024 x 768 (Note: Viewpoint will automatically expand the displayed area for screens with higher resolution)
- › .NET Version 4.5