CAMPBELL SCIENTIFIC
WHEN MEASUREMENTS MATTER

SkyVUE8
LIDAR Ceilometer

8 km Ceiling LIDAR Ceilometer

Cloud measurement with state-of-the-art signal processing

Overview

The SkyVUE™8 LIDAR Ceilometer is ideal for measuring cloud base heights and vertical visibility at airports, helipads (onshore or offshore), and other meteorological applications. The SkyVUE™8 measures the atmosphere with high stability and repeatibility, providing you with information on cloud base heights, sky condition (up to five layers), vertical visibility, and raw backscatter profiles. Notably, the ceilometer meets or exceeds all the necessary ICAO, CAA, and WMO requirements and recommendations.

Because of its robust construction, the SkyVUE™8 only requires minimal maintenance and can be continuously used in either static or mobile applications in harsh environments. Its compact design and low weight of 18 kg make it easy to transport and deploy.

With an operational reporting range of 8 km, the SkyVUE™8 has one of the highest in its class. It is easy to use yet features advanced signal processing and unique optics to provide superior resolution and performance.

The SkyVUE™8 has many standard features, from a tilting base and two-axis inclinometer for automatic correction of cloud base heights to heaters, blowers, and a sun filter for operation under all conditions—making deployments possible around the world.

Unique standard features include an easy-to-operate stratocumulus calibration, long-life back-up battery, and twin clocks to augment its many continuous diagnostic self-checks and provide assurance of continuous, reliable, and accurate performance.

Benefits and Features

- Single-lens design for high signal-to-noise ratio and maximized detector sensitivity, resulting in greater performance at low and high altitudes
- High performance and high specification at a competitive price
- Low power consumption with multiple power options
- Tilt angles to 24°, improving performance during precipitation events and reducing impact of solar glare
- Unique continuous comparison of two separate internal quartz clocks to eliminate possibility of clock drift and ensure measurement confidence
- User-friendly stratocumulus calibration capability and easy test with a calibrator plate provided as standard for easy field calibration
- Ability to run on AC or DC power

Specifications

Dimensions	737 x 294 x 240 mm (29.0 x 11.6 x 9.5 in.) including tilt base
Weight	18 kg (39.7 lb)

Instrument Performance

Reporting Range	0 to 8 km (0 to 26,250 ft)
Minimum Reporting Resolution	5 m (15 ft)
Hard Target Range Accuracy	±0.25%, ±4.6 m
Reporting Cycle	2 to 600 s
Cloud Layers Reported	Up to four layers
Sky Condition	Up to five layers with cover in oktas according to WMO requirements for SYNOP and METAR codes as standard
Vertical Visibility	Reported when there is obscuration but no clouds detected
Laser Type	InGaAs
Laser Wavelength	912 nm (±5 nm)
Eye Safety Standard	Class 1M

Electrical Specification

AC Power Source	115/230 Vac ±15% (auto switching), 50 to 60 Hz Power drain from 230 V is 15 W minimum, up to 380 W with all the heaters on.
DC Power Source Only	10 to 40 Vdc, current drain 1 A at 12 Vdc, 0.5 A at 24 Vdc (The AC heaters are not used when powered from DC alone.)
Battery	Internal 12 V 7 Ah battery backup
Interfaces	› Maintenance - USB 2.0 (USB 1.1 compatible) › Data - RS-232 / RS-422 / RS-485 / Ethernet option › Baud Rate - 300 to 115200 bps
Laser Safety Compliance	EN 60825-1:2014
EMC Compliance	EN 61326-1:2013
Electrical Safety Compliance	EN 61010-1:2010

For comprehensive details, visit: www.campbellsci.com/skyvue8

CAMPBELL SCIENTIFIC®
Campbell Scientific, Inc. | 815 W 1800 N | Logan, UT 84321-1784 | (435) 227-9120 | www.campbellsci.com
AUSTRALIA | BRAZIL | CANADA | CHINA | COSTA RICA | FRANCE | GERMANY | THAILAND | SOUTH AFRICA | SPAIN | UK | USA