





# 10 km Ceiling LIDAR Ceilometer

Cloud measurement with advanced signal processing

#### Overview

The SkyVUE™PRO LIDAR ceilometer measures cloud height and vertical visibility for meteorological and aviation applications and is ideal for long-term research applications where a high level of detail is required.

Its robust construction is ideal for long-term installation, as it requires minimal maintenance and features a unique stratocumulus calibration procedure—allowing the ceilometer to be calibrated in the field.

The SkyVUE<sup>™</sup>PRO complies with CAA, WMO, and ICAO guidance and meets or exceeds all recommendations and specifications, including CAP437, CAP670, and CAP746.

With an operational reporting range of 10 km, the SkyVUE™PRO is easy to use yet boasts advanced signal processing and unique optical arrangements to provide superior resolution and performance.

The SkyVUE<sup>™</sup>PRO has many standard features, from a tilting base and two-axis inclinometer for automatic correction of cloud 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
- > 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 ensure measurement confidence
- > Mixing layer height assessment option for air-quality applications
- > User-friendly stratocumulus calibration capability and easy test with a calibrator plate provided as standard for easy field calibration

## Specifications

Dimensions	100 x 32.7 x 28.1 cm (39.4 x 12.9 x 11.1 in.) including base
Shipping Dimensions	120 x 45.0 x 45.0 cm (47.2 x 17.7 x 17.7 in.)
Weight	32 kg (71 lb) without cables
Shipping Weight	58 kg (127.9 lb)

#### **Instrument Performance**

Reporting Range	0 to 10 km (0 to 33,000 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 no clouds selected
Laser Wavelength	912 nm (±5 nm)
Eye Safety Standard	Class 1M

Power	110, 115, 230 Vac ±10%, 50 to 60
	Hz, 470 W maximum
Battery	Internal 12 Vdc, 2 Ah battery backup
	Provides 2 h measurement, without blower/heater, in the event of mains failure.
Interfaces	<ul> <li>Data - RS-232 / RS-422 / RS-485 / Ethernet</li> <li>Baud Rate - 300 to 115200 bps</li> <li>Maintenance - USB 2.0 (USB 1.1 compatible)</li> </ul>
Laser Safety Compliance	EN60825-1:2001
Electrical Safety Compliand	ceEN61010-1
Environmental Spe	cification
Temperature Range	<ul> <li>-40° to +60°C (-40° to +140°F) excluding battery</li> <li>-20° to +50°C (-4° to +122°F) with standard battery</li> </ul>
	with standard battery
Humidity Range	0 to 100% RH

55 m/s (123 mph)

IP66 (NEMA 4x)

IP Rating

Maximum Wind Speed

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



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