Cloud Ceilometer CBME80

General

The cloud ceilometer CBME 80 is a stand-alone instrument designed for fixed and mobile installations where accurate and reliable cloud height information is required. The design is based on the LIDAR principle. The light emitting component is a low power diode laser with the output power limited to an eye-safe level. Real time digitizing technique is employed in signal detection and the powerful 80C186 microprocessor is used in signal processing.

Data presentation

CBME 80 has outputs for different types of display and recording units. An RS-232C interface supports local control, test and data acquisition. For remote control and data acquisition there is an FSK modem.

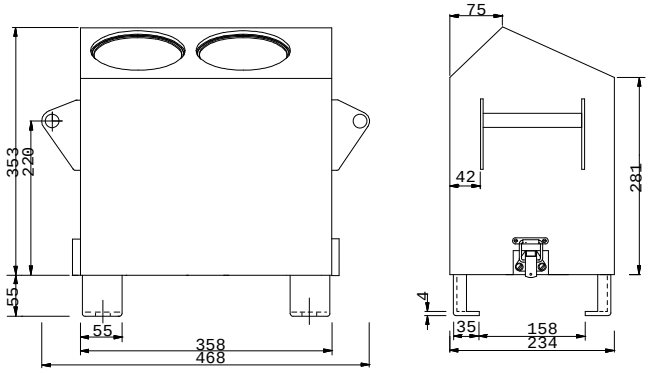
Maintenance

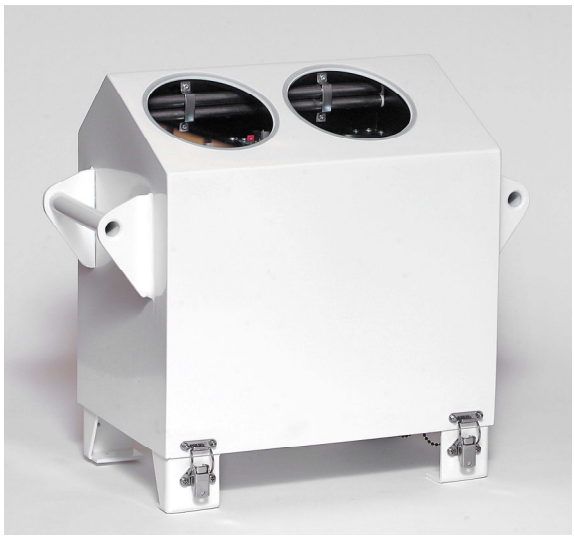
A built-in test system indicates failures in the event of a malfunction. The electronics are located in two easily replaceable subunits, i.e. a power supply module and printer circuit board. The subunits, as well as the laser diode which is placed on the printed circuit board, can be replaced by spare parts without adjustments or recalibration.

Features

- Reliable operation
- Easy installation and maintenance.
- Very long laser life (calc. 10 year)
- 25 000 feet measuring range capability.
- Low weight and low power consumption.

Dimensions





Technical data

Performance	
Range	0 — 7 500 m / 0 — 25 000 ft
Resolution	10 m / 30 ft
Accuracy	Greater of ±10 m / 30 ft or ±1% of height (against hard target)
Measuring interval	15, 30, 60, 120 s (selectable)
Laser safety	Eye safe Class 1M in accordance to IEC 60825-1
Environmental	
Operating temp	-40 — +55 °C / -40 — 130 °F
Weight	15 kg (standalone)
Electrical	
Power supply	115V alt 230V, 45-65 Hz
Power consumption	Electronics 30VA Heater 200VA
Output	
Interface	FSK/V23, RS232
Data	Cloud height (up to 3 layers) or vertical visibility Cloud amount / sky condition Status information Backscatter profile
Options and accessories	
Options	Window blower Solar shutter Mobile version with local display Power supply 12V DC Military green color
Accessories	Graphic software (PC) Cloud Presentation Suite Digital display Demodulator

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