CLOUD CEILOMETER

Type CBME 80
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. CBME 80 is a slightly modified version of CBME 40A with extended measuring range.

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.

TECHNICAL DATA
Range 30 — 25 000 ft
Resolution 30 ft
Accuracy ± 30 ft or 2% (whichever is the greatest) + resolution
Measuring interval 30 alt. 60 sec
Output format V23 FSK alt. RS232C 1200 Baud
Output data Cloud height 1-3 bases alt. vertical visibility. Echo profile as option
Operation temp. -40 — +50 °C
Power supply 115V alt. 230V, 45 — 65 Hz (electronics 30VA, heater 200VA)
Weight 15 kg (without stand)
Laser safety Eye safe according to EN 60-825
Options Window blower
Solar shutter
Mobile version
Power supply 12V DC
Green colour
Accessories Graphic program for PC with storing of data for 30 days
Digital display
Demodulator

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