ELIASSON
a MESOTECH company

CBME80B/CBME120
CEILOMETER

*THE WORLD'S MOST **TRUSTED** AND **RELIABLE** CLOUD SENSOR*

A compact and lightweight standalone instrument designed for measuring cloud base height and vertical visibility with exceptional accuracy up to 40,000ft (12km). Based on proven LIDAR technology, this third-generation ceilometer builds on Eliasson's 40+ years of industry experience with over 3,000 units installed worldwide, in aviation, meteorology, offshore and marine applications.

FEATURES AND BENEFITS

EASY MAINTENANCE
- Simple installation and minimal service needs
- Easily replaceable electronic subunits
- Built-in test system indicates failures
- Standard 2-years warranty with option to extend up to 5 years

VERSATILE CONNECTIVITY
- Supplied as preconfigured unit, including main assembly, sensors, and power equipment
- Full support provided for integration into existing systems and infrastructure or as part of a turn-key Mesotech AWOS or HMS system.
- RS-232 and RS-485 interface for local control and data acquisition, plus other interface options
- Built-in FSK modem for remote control and monitoring
- Compatible with various display and recording units
- Optional digital display BE360 or ruggedized laptop for standalone deployment

RELIABLE PERFORMANCE
- Exceptional operational reliability and long life expectancy with proven MTBF of over 10 years
- Low power diode laser with eye-safe output
- Detects up to five cloud layers
- Powerful microprocessor and real-time digitizing technique for advanced signal processing and accurate detection of even fine stratus cloud patches below solid cloud bases.

PRACTICAL DESIGN
- Compact, lightweight design
- Low power consumption ideal for remote installations
- Suitable for fixed and mobile installations
- Measurement range options: 7,600 m (25,000 ft) & 12,000m (40,000 ft)
- Accuracy of ±1% of measured distance

ACCESSORIES & OPTIONS

- Stand (1m height) for fixed installations
- Robust Leister Blower for enhanced detection in precipitation
- Sunshield to protect equipment when sun is in zenith (required in tropical areas)
- Cloud Presentation Suite - Graphical display software for Windows PC
- Internal backup battery options available
- Mobile version with integrated display
- Contamination detection
- Green Color (RAL 6003)
- Integrated Display
- FSK/RS-232 Converter - For use with V.23/FSK output

TES Thomson Environmental Systems
thomsongroup.com.au

APPLICATIONS

AVIATION
Provide critical cloud height and vertical visibility measurements for both civil and military aviation operations, ensuring safe takeoffs and landings even in challenging weather conditions. Meets or exceeds FAA, ICAO and WMO requirements.

METEOROLOGY
Deliver precise atmospheric data for weather forecasting and monitoring, contributing to more accurate predictions and enhanced public safety.

OFFSHORE & MARINE
Maintain reliable operations in maritime environments with robust performance on ships, oil platforms, and other offshore installations.

HELIPAD OPERATIONS
Support safe helicopter operations with precise cloud base measurements that meet CAP437 standards for offshore helicopter landing areas.

AIR QUALITY MONITORING
Enhanced understanding of pollution episodes, particularly during adverse weather conditions when air quality deteriorates rapidly. The technology's ability to track atmospheric layering and stability provides essential context for interpreting ground-level pollution measurements.

WHY CHOOSE ELIASSON?

With installations in over 120 countries across all continents, Eliasson has established itself as a leading manufacturer of cloud ceilometers and weather-related products. Our commitment to quality, reliability and customer satisfaction has made the CBME80B and CBME120 the preferred choice for organizations requiring dependable cloud height measurements in diverse environments.

CONTACT INFORMATION

www.eliasson.com
sales@mesotech.com

SPECIFICATIONS

Parameter	Specification
Measurement Range	CBME80B - 7,600 m (25,000 ft); CBME120 - 12,000 m (40,000 ft) Option Available
Accuracy	Greater of ± 5m or ± 1% of height (± 0.25% option available)
Cloud Layers Detected	Up to 5 layers
Laser Type	Low power diode laser (eye-safe)
Operating Temperature	-40°C to +60°C
Power Supply	Available in 110V or 230V AC versions
Interfaces	RS-232, RS-485, FSK modem, others on request
IP Rating	IP66 (optional)
Compliance	FAA, WMO, ICAO, CAP437 compliant
Weight	15kg