



MOBILE WIND MEASUREMENT SYSTEM (SOLID STATE)

FEATURING:

- No moving parts
- Wind speed, wind direction, pressure, temperature and humidity in one unit
- North Seeker
- Indestructible
- Long life
- Maintenance free
- Dependable operation in high winds, rain, snow, sleet, freezing rain, dust storms, and salt spray
- Microprocessor computing available
- Built-in radio communications

GENERAL DESCRIPTION:

The 207M has been specifically designed for mounting on any vehicle. It will withstand extremes of shock and vibration and operate accurately under all weather conditions.

The built-in North Seeker always detects True North. It allows the vehicle to be parked in any direction.

All components are in conformance with U.S. military specifications. This instrument has been operationally field-tested by the U.S. Army.

Wind sensing is achieved by thermal resistive platinum film sensors which are guaranteed to retain their electronic characteristics indefinitely. Two pairs of sensors are mounted at right angles to each other in order to sense two components of the wind vector (X and Y). Wind speed is a function of the magnitude of the two signals. Wind direction is the arctangent of the magnitude of the two orthogonal signals.

SPECIFICATIONS:

Wind Speed Performance:

Range: 0 to 100 knots
Survival Range: No limitation
Low Speed Threshold: 0.05 M/S
Accuracy: $\pm 3\%$ or better (U.S. Bureau of Standards traceable)
Operating Temperature Range: -40°C to $+70^{\circ}\text{C}$
Response Time: Instantaneous

Wind Direction Performance:

Range: 0 to 360° (100% of degree scale)
Survival Range: No limitation
Low Wind Measurement Threshold: 0.05 M/S
Accuracy: $\pm 5^{\circ}$ or better (U.S. Bureau of Standards traceable)
Operating Temperature Range: -40°C to $+70^{\circ}\text{C}$
Response Time: Instantaneous

Temperature Sensor Performance:

Range: -50°C to $+150^{\circ}\text{C}$
Accuracy: $\pm 0.5^{\circ}\text{C}$

Pressure Transducer Performance:

Range: 500mb to 1200mb or 600mb to 1100mb
Accuracy: $\pm 2\text{mb}$

Humidity Sensing Performance:

Range: 0 to 100% RH
Accuracy: $\pm 2\%$

Sensor Type:

Wind Speed and Direction: Platinum film
Temperature: Platinum 100 RTD
Pressure: Wheatstone Bridge on silicone diaphragm
Humidity: Rotronic Hygromer C-80, capacitive

Electrical Characteristics:

Input Power: 24 VDC
Power Requirement: 2.5 amps
Analog Output: 0 to ± 5 VDC or 0 to ± 10 VDC
Digital Output: RS232 interface

Physical Characteristics:

Probe Height: 19.6 in/50cm
Probe Weight: 7.5 lbs/3.4 Kg
Probe Finish: Anodized aluminum

Optional:

Solar Radiation: This sensor can be mounted on top alongside the aenal.

ORDERING INFORMATION:

Model 207M001	Probe only
Model 207M001t	Probe with temperature
Model 207M001p	Probe with pressure
Model 207M001p/t	Probe with press and temp
Model 207M001p/t/h	Probe w/press/temp/humidity
Model 207M003	Signal conditioner
Model 207R24	Mounting adapter
Model 207R23	Cable

AUTHORIZED AGENT:

FOR ADDITIONAL INFORMATION WRITE TO MANUFACTURER:

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EARTH SATELLITE CORPORATION (EarthSat), a remote sensing consulting firm, has been a leader in applying advanced technologies to the exploration, development, and management of earth resources since 1969. EarthSat's analysis, satellite imagery, and map products have served private industry and federal, state, and local agencies in some 50 countries.

EarthSat's GEOPIC™ processing of satellite imagery which maximizes scene quality, resolution geometry, and spectral information, and can generate special products, produces images used for interpretation, analyses, and map making. Direct sales of imagery to clients who do their own interpretation represent a large portion of EarthSat's image processing volume. EarthSat's photolab services include the photowriter production of hardcopy film or print images from client-processed CCT's.

EarthSat's CROPCAST™ is an agriculture information service based on worldwide weather data and advanced crop simulation models. CROPCAST provides real-time worldwide agricultural data and projections in daily reports, direct computer access, and comprehensive bi-weekly reports.

EarthSat's products and services for the oil and gas industry have been employed successfully by our clients in locating new reserves both on the frontiers and in established producing areas. EarthSat provides exploration lead maps, regional geologic studies, specially processed satellite imagery, geologic consulting services, regional minerals and ground water exploration studies.

Consulting services for natural resource management, land use planning and environmental issues are a major EarthSat activity. Advanced remote sensing and conventional methods are applied to land use inventories, land capability studies; forest, range, and wetlands mapping; coastal and hydrologic studies; site selection; evaluation of mined land and waste disposal impacts; and other programs requiring accurate and timely information for land use planning and resources development and management. Air photointerpretation and field studies are an essential component of all of EarthSat's analytical work.

MONITORING AND CONTROL EQUIPMENT

DATA ACQUISITION SYSTEMS AND SENSORS

Applications in meteorology , climatology , hydrology
agriculture , forestry and air quality

Our dataloggers are designed to operate unattended
in remote and harsh environments

They consume little power , are fully programmable ,
accept a wide range of sensors and perform a variety
of data processing , archiving and control .

The data can be stored on site , or transmitted via:

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- telephone
- telephone and radio combinations
- hard wire modems
- satellite
- meteor burst communications

Software packages assist in programming dataloggers
in processing, graphing and tabulating data
and in communicating with the datalogger
in manual or automatic modes.



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