Dew Point Hygrometry

The CAMBRIDGE SYSTEMS® Dew Pointer from EG&G offers a primary measurement of humidity. As an inert metallic mirror is chilled thermoelectrically to the actual atmospheric dew point, the change in reflectance is detected photoelectrically to control the cooler's power supply. Independently, a precision resistance element measures mirror temperature. Dew point temperature is continuously displayed or used for control purposes. This is a fundamental measurement of water vapor partial pressure, and, once known, all humidity definitions can be expressed. No calibration gases or chemical resistance grids are used, eliminating aging or contamination problems. Fool-proof standardization is done by automatic mirror heating and nulling out any contamination effects by bridge adjustment. No other instrument offers these standardizing and sensing methods, and because the dew point does not change with ambient temperature, either in-situ sensing or sample tubing from the atmosphere may be used.

Features
• Precision Thermistor Elements
• Ambient Temperature and Dew Point
• Automatic Standardizing
• Linear Voltage Outputs (for recording)
• Fast Response
• −80°F to +120°F Dew Point

Applications
• Synoptic Observations
• Calibration
• Shipboard
• Micrometeorological

Model 110/Weather Station

Model 880/Portable System

Features
• NBS Platinum Resistance Elements
• Ambient Temperature and Dew Point
• Portable/Self-Contained
• Low Price ($975.00)
• Wide Range/−40°F to +120°F Dew Point
• Fast Response

Applications
• Calibration Standard
• Air Pollution Monitor
• Agricultural Meteorology
• Life Sciences

Model 137/Aircraft System

Model 992/Calibration Standard

Features
• Miniaturized/Mil/Spec
• NBS Platinum Resistance Element
• Linear Voltage Output (for recording)
• Fast Response
• −70°F to +160°F Dew Point

Applications
• Aircraft Cloud Physics
• Hurricane/Seeding Measurements
• Spacecraft and Underwater Life Support
• Portable and Remote Weather Stations


EG&G
Analytical Humidity Instrumentation

Model 992/Calibration Standard

Features
• NBS Platinum Resistance Element
• Automatic Standardizing
• Widest Range/−100°F to +200°F Dew Point
• Multiple Sample Tube Sensing
• Stainless Steel Dew Point Sensor

Applications
• Calibration Standard
• Environmental Chambers and Wind Tunnels
• Remote Sample Line Sensing

Do you know how easily you can have weather radar data?

A New Weather Bureau Program of Interest to the Meteorological Community

Recognizing the need for more immediate information on local weather patterns, the Weather Bureau has been evaluating ways to provide Weather Radar information to interested parties quickly, and economically. A technique has been developed whereby the same information that is displayed on a Weather Radar PPI Scope can be transmitted via telephone lines from the radar site to the location or locations of those interested in the readout. Radar coverage is 250 miles in radius.

Formerly referred to as RATTS '65 and '68, this program is now called the Weather Bureau Radar Remote System. Plans are now underway to increase the total number of transmission centers around the country to 30 by 1971. Members of the Meteorological Community will be allowed to connect to this system via private telephone line after receiving permission from the Weather Bureau Regional Director.

Meteorologists can also "dial-up" transmitters located in other parts of the country utilizing Data Phone Subsets and receive remote radar recordings of weather conditions in that location.

Soft Copy...Hard copy — Besides being approximately half the cost of TV Monitors, Alden’s Remote Radar Recorder can provide permanent, easily interpretable radar pictures at the rate of one every 90 seconds over standard telephone lines. A hard copy record greatly facilitates the tracking of weather movements under severe storm conditions. In less crucial situations, recorders can be "programmed" to provide less frequent receptions but still enough to forecast trend information necessary for accurate and timely local forecasts.

Operating unattended the Alden Recorder does not tie up a meteorologist who would otherwise be viewing fleeting radarscope images on a slow scan TV monitor. The Alden Recorder is also often capable of capturing echo patterns normally lost on slow scan TV monitors.

Alden The Experienced Weather Facsimile Manufacturer — Alden has been supplying facsimile recorders to the Weather Bureau since 1957. Today, thousands of Alden recorders are in use receiving weather charts 23 hours a day, 7 days a week, 52 weeks a year.

Experience in weather radar remoting dates back to 1962 when the photo link between Nantucket and the Boston Weather Bureau was established for hurricane warning. Identical systems were installed between Catalina and Los Angeles, Sacramento and San Francisco, and in the Pittsburgh area. Alden automatic radar recorders are now in use on Washington, Detroit and Galveston radars.

A Product Without Service Backup Is like No Product At All — Backed by over 230 service representatives around the country Alden recorders enjoy a very high up time in product reliability and a minimum of down time due to unavailability of service personnel.
It’s a Bendix-Friez product. Built to withstand the tough demands of unattended operation in remote locations, it boasts top-notch data acquisition and meteorological sensors.

Competitively priced of course.

Output options? Choose from paper-tape punch, magnetic tape, strip printer or teletype. Inputs? Rainfall, barometric pressure, wind speed; also wind direction, temperature and humidity.

This versatile meteorological station is compatible with the famous Bendix Aerovane,® too.


Now then. Like to give a reliable, economical weather forecaster a job? Get in touch. The Bendix Corporation, Environmental Science Division, Dept. 81, 1400 Taylor Ave., Baltimore, Maryland 21204.

Reliable meteorological station seeks employment in remote location.
Volume 52, number 6, June 1971

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Cover photograph: Severe thunderstorms, with dark stratocumulus and lighter altocumulus clouds, associated with a cold front moving northeastward across Minnesota at approximately 1700 EST in June 1966. The photo was taken looking due north, and is one of a series of remarkable cumulonimbus-type cloud pictures taken by Roger Jensen of Lake Park, Minn.