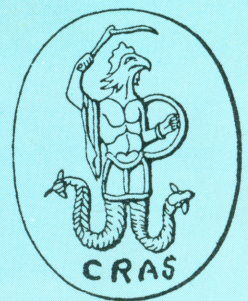
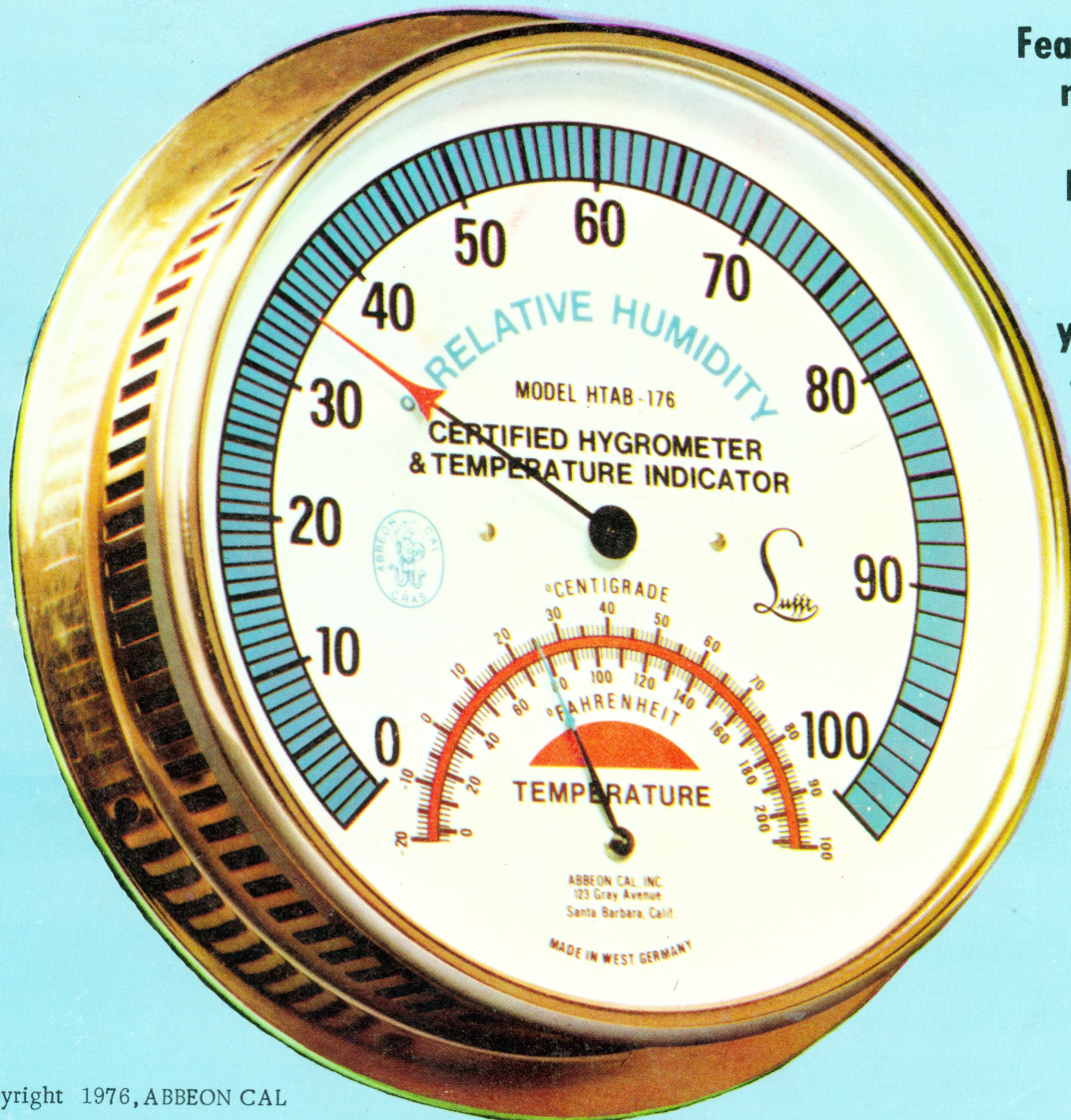


# ABBEON'S INDUSTRIAL LABORATORY AND PLANT INTERIM CATALOG #2

JOHN A. LEDNICKY  
P.O. BOX 250  
GREENHILLS P.O.  
RIZAL, PHILIPPINES  
D-738

Featuring our brand  
new HTAB-176  
A certified  
Hygrometer &  
Indicator  
with a one  
year guarantee  
& a five year  
warranty  
(see page 2)



Copyright 1976, ABBEON CAL

## QUO DUBITARE PROCRASTINUS

NOTE: Prices herein are as of January 1, 1976 and are subject to adjustment to price schedules as of shipment date.  
Rest assured that we will always charge the lowest fair price possible—you are protected by our

**IRONCLAD  
GUARANTEE**

No ifs, ands or buts in our guarantee — here it is — 100% absolute satisfaction is guaranteed or your money back within 10 days without question or quibble.

VERIFIED & APPROVED  
 G. LUFFT METALLBAROMETERFABRIK  
 STUTTGART, GERMANY

JOHN A. EDMICK

# ABBEON'S NEW CERTIFIED HYGROMETER AND TEMPERATURE INDICATOR

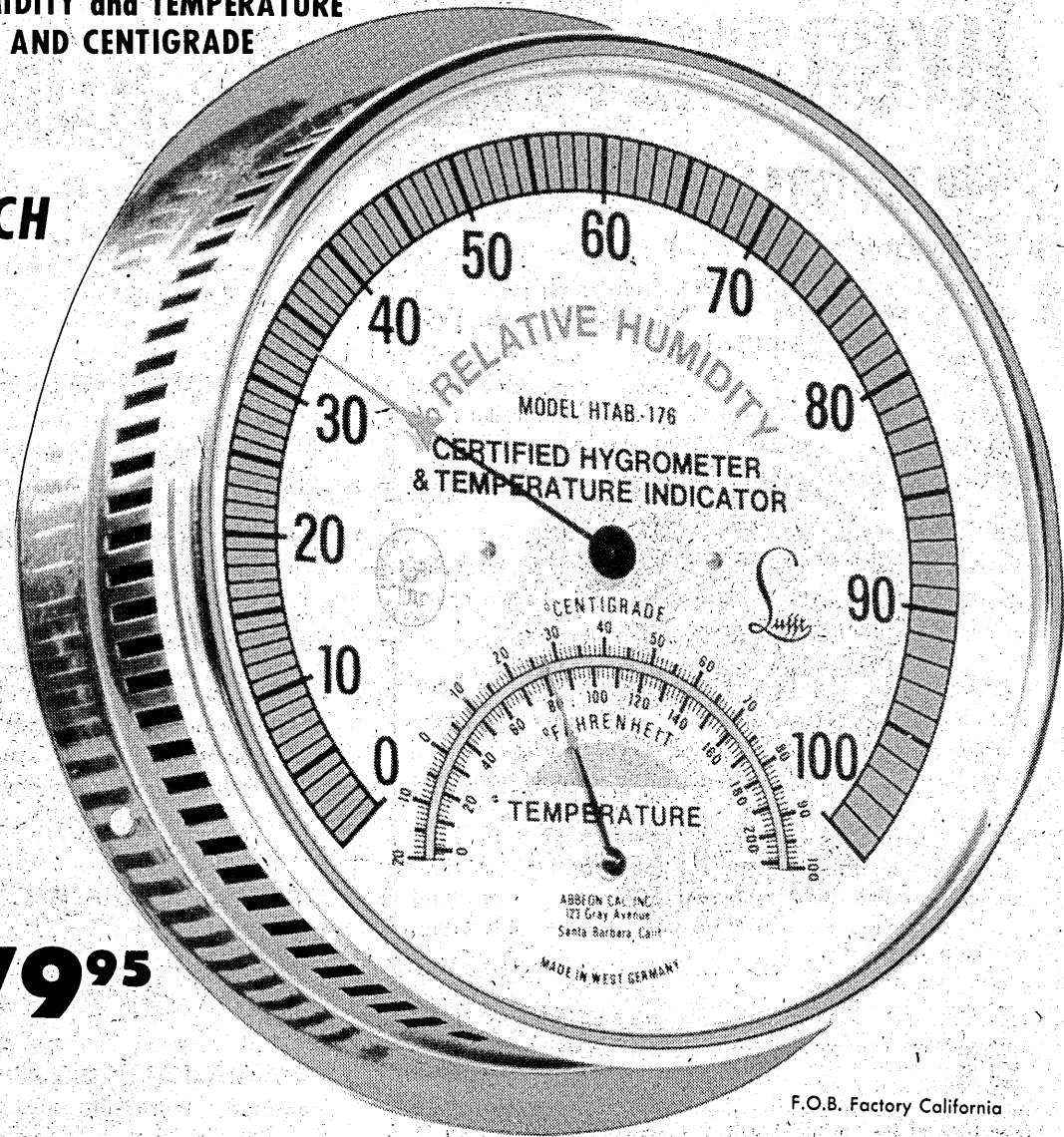
Shows RELATIVE HUMIDITY and TEMPERATURE IN BOTH FAHRENHEIT AND CENTIGRADE at a Glance.

**LARGE 5 INCH DIAL**

6" overall diameter  
 Model HTAB-176

**SHOWN ACTUAL SIZE**

PRICE MODEL NO. HTAB-176 **\$79<sup>95</sup>**



F.O.B. Factory California

THE ABBEON CERTIFIED HYGROMETER MODEL NO. HTAB-176 is certified to be accurate within 2% plus or minus. The dial indicates the complete range of 0 to 100% relative humidity. Each instrument has been tested at three different positions of the dial at temperatures ranging from 32 degs. to 230 degs. F. The original calibration and certification are done under the supervision of Dr. Helmut Brauckhoff, of the G. Lufft Metallbarometerfabrik GmpH-Stuttgart, under the standard conditions of the Federal Republic Test Society.

This is the only humidity indicator that we know of that has a 1-year guarantee and a 5-year warranty. Some of our humidity indicators working on the same principle as this improved instrument have been in use for over 10 years and are giving satisfactory service day after day, month after month, and year after year.

SPECIFICATIONS FOR THE MODEL NO. HTAB-176 ARE AS FOLLOWS: Casing solid brass with gleaming finish, color differentiated dial with black numbers and lettering, red tipped pointer, casing is drilled for wall mounting. Temperature dial range is minus 20 to 100 degs. C and 0 to 210 degs. F. Dial is direct reading without any calculations whatsoever. Size 6 inches overall, dial face 5 inches in diameter. Shipping weight 3 pounds

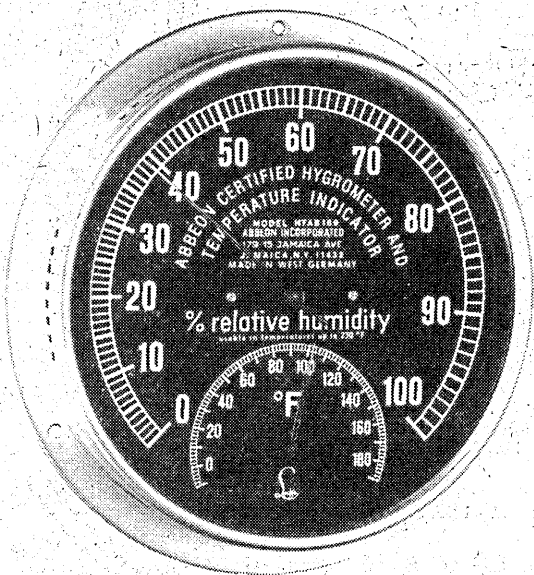
<u>ONE YEAR GUARANTEE</u>	
Any time within one year from date of purchase we will repair or recalibrate this instrument without charge for any defect due to manufacture.	
<u>FIVE YEAR WARRANTY</u>	
After expiration of the one year warranty we will repair, recalibrate or replace this instrument at the following service charge:	
2nd year, 20%	of prevailing new unit price
3rd year, 40%	" " " " "
4th year, 60%	" " " " "
5th year, 80%	" " " " "

THE ABBEON  
**CERTIFIED  
 HYGROMETER**

**AND TEMPERATURE INDICATOR**

Shows RELATIVE HUMIDITY and TEMPERATURE at a  
 Glance

LARGE 5 INCH DIAL — NO SQUINT — NO  
 CALCULATIONS



6" overall diameter

Model HTAB169-B

The Abbeon Certified Hygrometer Model No. HTAB-169 is certified to be accurate within 2% plus or minus. The dial indicates the complete range of 0 to 100% relative humidity. Each instrument has been tested at three different positions of the dial at temperatures ranging from 32 degs. to 230 degs. F. The original calibration and certification is done under the supervision of Dr. Helmut Brauckhoff of the G. Lufft Metalbarometerfabrik, GmbH-Stuttgart, under the standard conditions of the Federal Republic Test Society.

Each instrument is rechecked before shipment. If it varies from test accuracy during field use it can be brought into calibration by checking it against a known standard and if need be resetting to the correct reading by turning the calibration screw, located inside the wide bottom slit.

Specifications for the Model No. AB-169 are as follows: Casing solid brass with gleaming finish, black dial with white numbers and lettering, red tipped pointer, casing is drilled for wall mounting. Temperature dial range minus 10 degs. F. to 190 degs. F. Dial is direct reading without any calculations whatsoever. Size 6 inches overall, dial face 5 inches in diameter. Shipping weight 3 pounds.

**Price Model No. HTAB-169-B**

**\$48<sup>95</sup>  
 NET**

Your check with order we pay postage. Or rated firms shipped open account net 10 days. F.O.B. Santa Barbara, Calif.

PLEASE KIND FRIEND MARK ON YOUR ORDER CATALOG NO. AND PAGE NO.

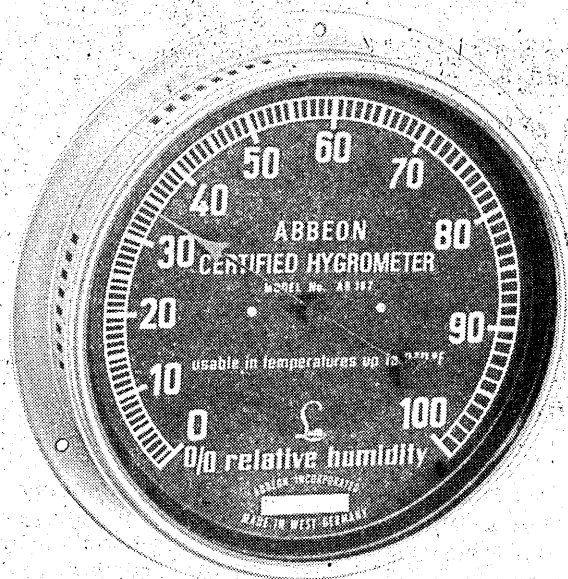
THE ABBEON  
**CERTIFIED  
 HYGROMETER**

**Shows Relative Humidity at a Glance**

LARGE 5 INCH DIAL — NO SQUINT — NO  
 CALCULATIONS

6" overall diameter

Certified Hygrometer No. 167 is certified to be accurate within 2% plus or minus. The dial indicates the complete range of 0 to 100% relative humidity and each instrument has been tested at three different positions of the dial at temperatures ranging from 32° to 230° F. The original calibration and certification is done under the supervision of Dr. Helmut Brauckhoff of the G. Lufft Metalbarometerfabrik, GmbH Stuttgart, under the standard conditions of the Federal Republic Test Society.



SOLID BRASS CASING

**\$38<sup>50</sup>  
 NET**

Model AB-167-B

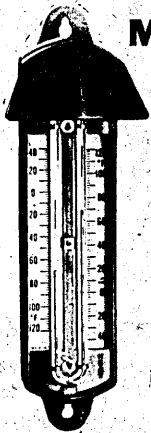
Over 50,000 Abbeon Humidity Indicators are in daily use. We are willing to stake our reputation built on 35 years of experience in selling over \$2,000,000 net of humidifiers, dehumidifiers and humidity indicators on the fact that this Model AB-167 is the finest direct reading humidity indicator that you have ever seen.

**IRONCLAD GUARANTEE**

No ifs, ands or buts in our guarantee - here it is - 100% absolute satisfaction is guaranteed or your money back within 10 days without question or quibble.

# PRECISION INSTRUMENTS FOR HOME, OFFICE AND FACTORY

## No. 10-122-B— MAXIMUM AND MINIMUM THERMOMETER

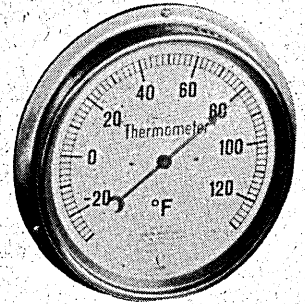


A newly designed model with "Shelter Top" hood so that accurate readings will be obtained when the thermometer is exposed to the weather in an unsheltered area. The hood may be removed when the thermometer is installed in a sheltered area. The white scale is graduated from -40 to +120° F in 2 divisions and is set into a grey plastic case 10 1/2" long. Supplied complete with magnet and instructions.

**\$19<sup>50</sup>**

## No. TAB 63 Dial Thermometer

A precision thermometer to match the AB-62 Precision Hygrometer. Large easy to read dial graduated in 2 degrees. Range minus 30° to plus 130°F. Case specifications the same as No. AB-62 Hygrometer.



**\$34<sup>50</sup>**

ALSO AVAILABLE IN THESE RANGES

THIS IS OUR FAMOUS  
YMCAT (10-128) THERMOMETER  
USED IN SAUNAS AND  
STEAMROOMS →

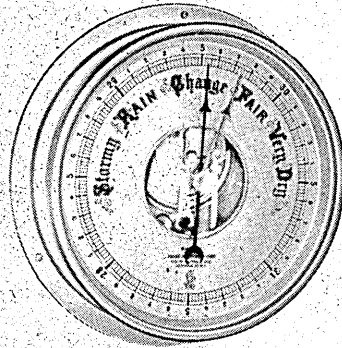
RANGE  
30° F-230° F  
2° INCREMENTS

**\$34<sup>50</sup>**

No. YMCAT-B

## BAR 130-B BAROMETER

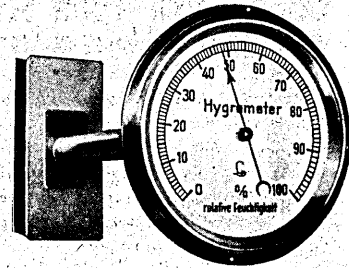
This fine precision barometer is the same size and general appearance as No. AB62 Humidity Indicator and No. TAB 63 Dial Thermometer and is often used with them to make a matching set. It features an open dial graduated from 28 to 31 inches with a visible precision polished mechanism and solid brass case.



**\$38<sup>50</sup>**

## AB10-B INSTALLATION HUMIDITY INDICATOR

Hygrometer for wall installation with immersion tube for large wall thickness. Rigid immersion tube with "Durotherm" measuring element mounted in perforated metal case. Aluminum dial 4" in diameter with nickel plated bezel. Suitable for relative humidity measurements at high temperatures up to 230°F. Measuring range 0 to 100% relative humidity.



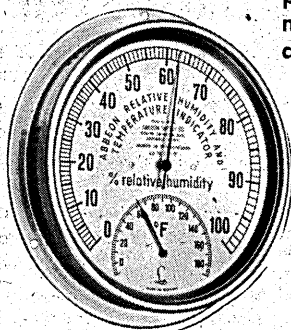
No. 10-106-B 4" Immersion depth = **\$99<sup>50</sup>**

No. 10-107-B 10" Immersion depth = **\$114<sup>95</sup>**

No. 10-108-B 20" Immersion Depth = **\$145<sup>50</sup>**

## M2A4 RELATIVE HUMIDITY AND TEMPERATURE INDICATOR

Shows relative humidity and temperature at a glance. The precision "Durotherm" hygrometer element is combined with a properly designed metallic thermometer and mounted in an attractive gleaming brass case.



**SPECIFICATIONS:**  
Relative Humidity Range: 0 to 100%  
Temperature Range: -10°F. to +190°F.  
Case: Polished brass—6" overall diameter  
Dial: Silvered with black figures—5" diameter.

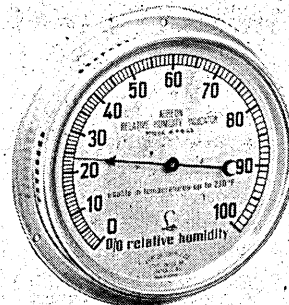
OVER 20,000  
IN DAILY USE

No. M2A4-B

**\$38<sup>95</sup>**

## AB-62 PRECISION

## HUMIDITY INDICATOR



For use where precision accuracy is required. Featuring the "Durotherm" element, this model has a polished brass flange type case with silvered metal dial. The dial is graduated in single percentages. Size: Dial 5" — Overall 6".

Item No. 10-101

**\$34<sup>50</sup>**

WHEN ORDERING—PLEASE MENTION CATALOG NO. AND PAGE NO.

## MONEY BACK GUARANTEE

We guarantee 100% absolute satisfaction — no ifs — no ands — no buts — order what you wish — try them free for 10 days — if not completely satisfied return them without any obligation.

F.O.B. Warehouse California

PLEASE KIND FRIEND MARK ON YOUR ORDER CATALOG NO. AND PAGE NO.

**No. AB2T-B  
INDUSTRIAL  
HUMIDITY INDICATOR**

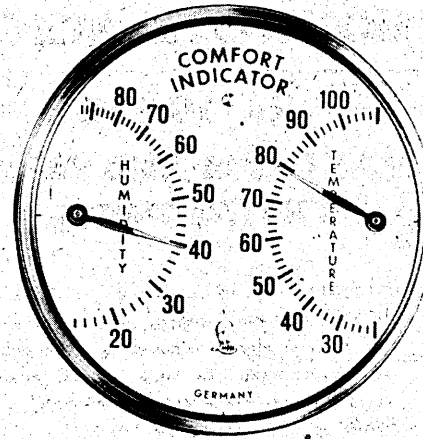
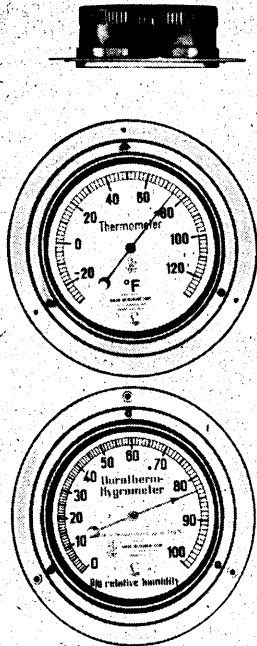
Precision Hygrometer with "Durotherm" measuring element. Flush mounted type with ventilation slits on the hidden side for measuring relative humidity. Suitable for installation at the outside of air ducts, drying chambers, incubators, etc. Can be used at temperatures up to 230°F. Measuring range 0 to 100% relative humidity.

MODEL AB2T  
Dial Diameter: 5 1/8"  
Overall Diameter: 7"  
Mounting Depth: 1"  
Price:

**\$52<sup>50</sup>**

**No. AB3T-B  
MATCHING THERMOMETER**

Range - 20 to +120°F **\$52<sup>50</sup>**



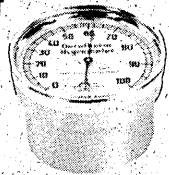
**No. 993-B COMFORT INDICATOR**

A new model combining "Precision" hygrometer and thermometer on single scale that will stand on table or desk or hang on wall. The 3 1/8" dial is color coded to show the proper temperature and humidity ranges for comfortable room conditions. Polished brass case with folding easel and wall hanger.

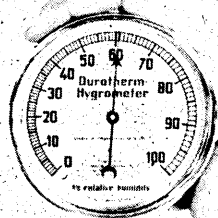
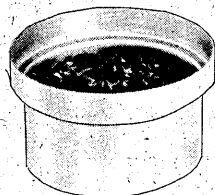
**PRICE \$23<sup>50</sup>**

**MODEL #R-560-A  
CONTAINER TYPE HYGROMETER  
USED TO DETERMINE MOISTURE CONTENT**

By using this instrument the absolute moisture content of grainy or powdery materials can be determined. Place matter in anodized aluminum cup, cap, wait approximately 20 minutes, the relative humidity is shown on the Direct Reading Dial. This reading can then be referenced to a humidity equilibrium table, which is included. Size: 3 3/4" high, 4" diameter.



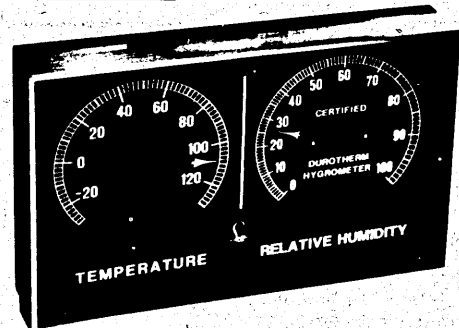
**\$38<sup>95</sup>**



**No. 5024-B CERTIFIED DUROTHERM  
HYGROMETER AND THERMOMETER**

Designed for those who require an easy-to-read highly accurate instrument. A test certificate is supplied with each instrument certifying that it has been calibrated to an accuracy of within 2% relative humidity and ±2° temperature. The jet black scale has white graduations with a relative humidity range from 0 to 100% in 1% divisions and a temperature range from -20° to +120° Fahrenheit in 2% divisions. The rectangular metal case is framed in satin brass measuring 8"x5", and can either hang or stand.

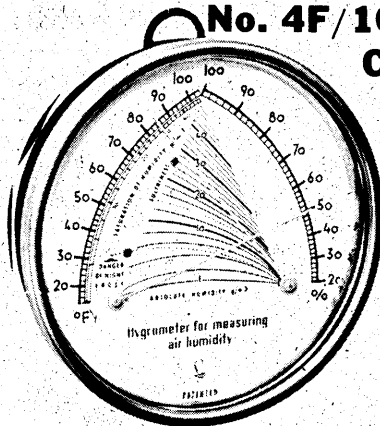
**PRICE \$75<sup>00</sup>**



**No. 4F/100-B—MOISTURE  
CONTENT METER**

- ★ Relative Humidity
- ★ Temperature
- ★ Absolute Humidity
- ★ Dew Point
- ★ Saturation Humidity
- ★ Saturation Deficit
- ★ Indication Night Frost
- ★ Comfort Indicator

Brass case with silvered dial 4" in diameter. Relative Humidity Range: 20% to 100%. Temperature Range: +20° to 100°F.

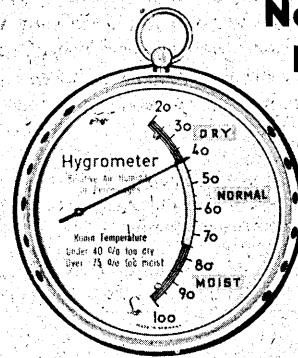


A scientific instrument combining a specially calibrated bi-metallic thermometer and "Durotherm" hygrometer. Due to the outstanding construction and calibration of this instrument the user can easily obtain the forementioned readings relating to atmospheric conditions.

**\$34<sup>50</sup>**

WHEN ORDERING—PLEASE MENTION CATALOG NO. AND PAGE NO.

**No. 5/90-B ROOM  
HYGROMETER**



The proper humidity is essential to healthy living conditions. This precision hygrometer with the new Luft "Durotherm" element is smartly styled to create a decorative but useful touch to any wall. Polished brass case with silvered metal dial. The dial is clearly marked to

show the proper humidity that should be maintained. Size: Dial 3 1/2" Overall 3 3/4".

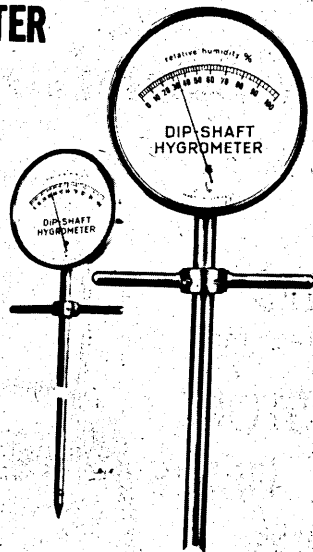
**PRICE \$21<sup>50</sup>**

## DIP SHAFT HYGROMETER

This instrument obtains a true reading of the relative humidity of the interior of bulk materials. The shaft is some 20 inches long and is easily probed into loose products such as wool, cotton, flour, hay, tobacco, grain, paper, etc. The probe end contains a hygro sensitive element which transmits the reading mechanically to a dial at the top of the instrument. This relative humidity reading allows the observer to determine the percent of moisture content by empirical experience or by consulting a Table of Humidity Equilibrium.

Model ABX-11-B

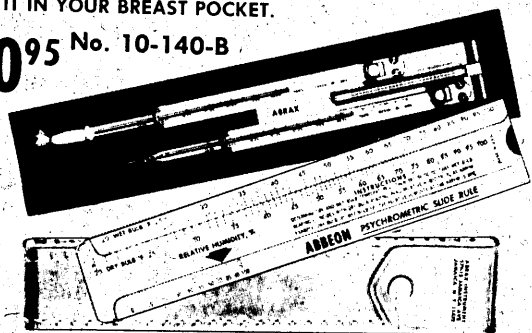
\$64<sup>50</sup>



## POCKET SLING PSYCHROMETER

SIMPLE TO OPERATE — JUST SATURATE THE WICK OF THE WET BULB THERMOMETER WITH CLEAN WATER AND WHIRL THE SLING PSYCHROMETER UNTIL THE TEMPERATURE STOPS DROPPING. READ THE TWO THERMOMETERS AND PLACE WET BULB TEMPERATURE OVER THE DRY BULB TEMPERATURE SCALE ON THE SLIDE RULE — THE ARROW WILL THEN POINT DIRECTLY TO THE ACCURATE RELATIVE HUMIDITY. — THAT'S ALL THERE IS TO IT! CARRY IT IN YOUR BREAST POCKET.

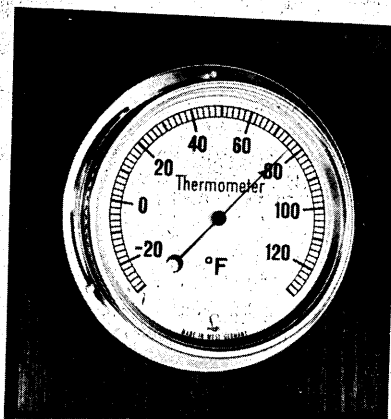
\$20<sup>95</sup> No. 10-140-B



## WALL BAROMETER - THERMOMETER OR HYGROMETER

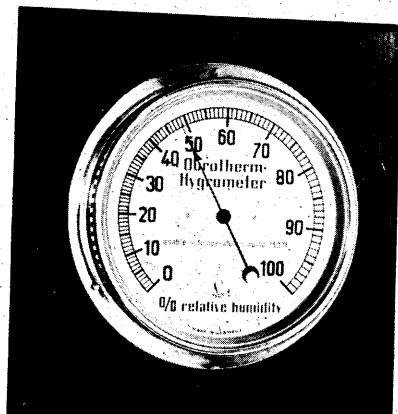


No. 3130B



No. 3130T

To create these attractive models we have taken our popular No. 2/130 series of barometer, thermometer and hygrometer and mounted them on 7 3/4" square wood wall plaques. The wood plaques are made from 3/4" thick air dried native Maine white pine sanded and finished to bring out the ever varying grain patterns of this most interesting wood. The plaque is stained a medium brown, vinyl sealed and lacquered to best reveal the grain pattern and resemble a hand rubbed finish. The polished solid brass cases of the instruments against the wood background create a most attractive and useful wall piece.



No. 3130H

No. 3130BB WALL BAROMETER - PRICE \$42<sup>50</sup> EACH

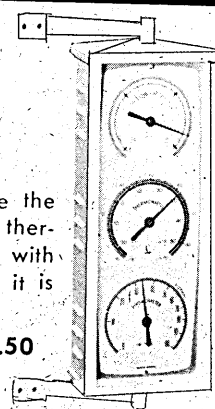
No. 3130TB WALL THERMOMETER - PRICE \$42<sup>50</sup> EACH

No. 3130HB WALL HYGROMETER - PRICE \$42<sup>50</sup> EACH

## No. 1906B WINDOW WEATHER SET

A complete miniature weather bureau for mounting outside the window. This outstanding instrument combines barometer, thermometer and hygrometer mounted in a weather-proof case with brackets for mounting on window frame, porch, etc. where it is visible from indoors. Height 6", Width 2 1/2".

PRICE \$49.50



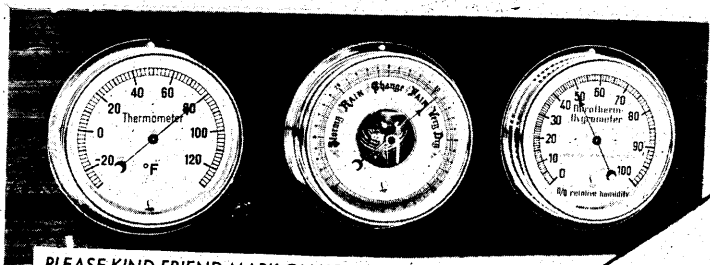
WHEN ORDERING — PLEASE MENTION CATALOG NO. AND PAGE NO.

## No. A764-B Weather Panel

In response to many requests, we have taken the popular No. 2/130H "Durotherm" hygrometer with matching thermometer and barometer and mounted them on a grained walnut panel. The result is a panel of three scientific precision instruments in a setting that would make a worthy addition to any home, office or club. Instruments: Polished brass cases 6" diameter.

Panel: Grained walnut width 22", height 7 3/4".

Price \$125.00



PLEASE KIND FRIEND MARK ON YOUR ORDER CATALOG NO. AND

# The Moisture Monitor Reg. U.S. Pat. Office



MODEL M-200  
PORTABLE

**\$195<sup>00</sup>**

INCLUDES 1 PROBE

**READS MOISTURE  
IN ALL BASIC FIBERS  
AND BLENDS**

FLAT STOCK  
PROBE—\$35

... IN THE MILL  
... OR IN THE LAB

- ✓ DIRECT READING, NO CALIBRATION, NO CHARTS
- ✓ NATURAL OR SYNTHETIC FIBERS, SINGLE FIBER OR BLENDS
- ✓ INTERCHANGEABLE DETECTORS

The M-200 Portable Moisture Monitor is designed to give immediate readings of moisture in textile fibers and blends . . . without the aid of bone dry tests, correlation charts, or special settings.

A "percent regain" reading is obtained by simply applying the detector roll to the material . . . single fiber or blend . . . at virtually any stage of the textile manufacturing process. It is especially valuable in spot checking moisture in loom beams, fabrics, and picker laps . . . while in motion or while standing . . . in the laboratory or in the mill.

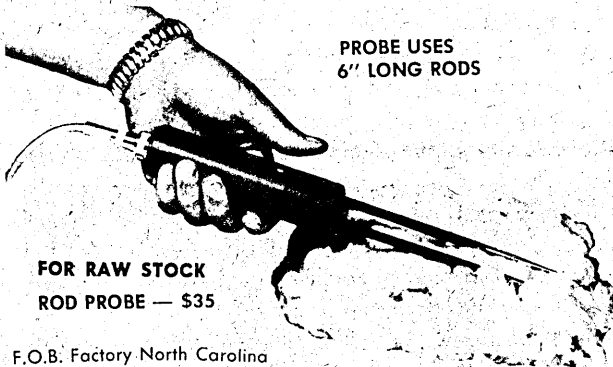
Nine operating positions, easily selectable on the front panel, cover every important application, from warps and fabrics to raw stock, moving or standing, in simple construction or blend, natural or synthetic.

65-35 Dacron-Cotton . . . 50-50 Acetate-Rayon . . . 70-30 Wool-Orlon . . . read them all without making a single change and without any special data. Regardless of fiber participation from zero to one hundred per cent, the instrument reads actual moisture . . . in total . . . and in each fiber, separately.

Permanently calibrated from 0.1 to 36 per cent regain, the M-200 is the one instrument that meets every requirement.

WHEN ORDERING—PLEASE MENTION CATALOG NO. AND PAGE NO.

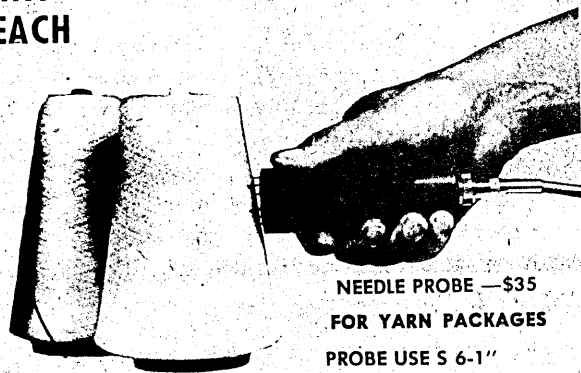
**SPECIFY WHICH PROBE YOU WANT  
ADDITIONAL PROBES ARE \$35 EACH**



PROBE USES  
6" LONG RODS

FOR RAW STOCK  
ROD PROBE — \$35

F.O.B. Factory North Carolina



NEEDLE PROBE —\$35  
FOR YARN PACKAGES

PROBE USES 6-1"  
LONG NEEDLES

\* DACRON & ORLON ARE  
TRADE MARKS OF  
DUPONT

PLEASE KIND FRIEND MARK ON YOUR ORDER CATALOG NO. AND PAGE NO.

PAGE 7



This photo shows the technician adding the Barium Chloride solution to the special paper in one of the two stainless steel containers. The sensor head is shown in the foreground.

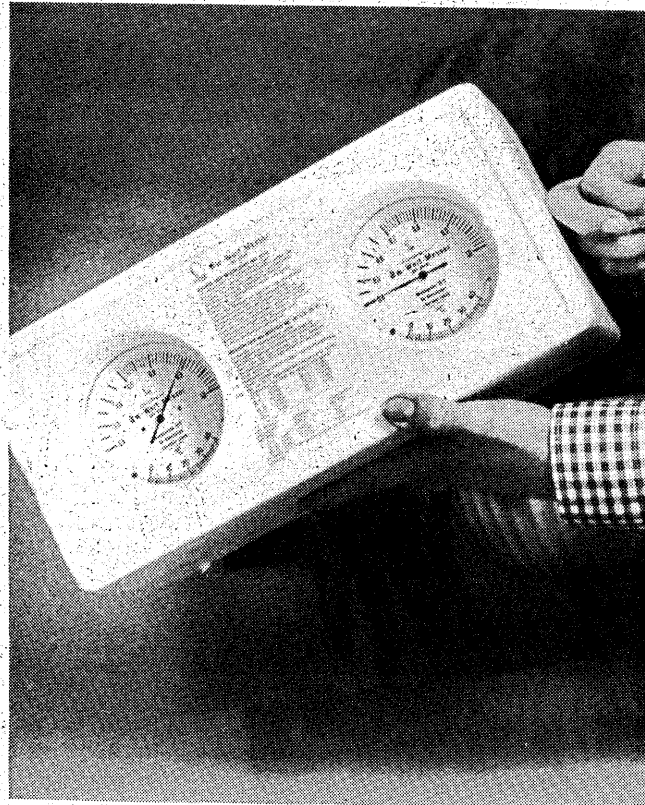
### Model 5803 $a_w$ -Value Analyzer

includes 2 complete stainless steel measuring containers & 2 sensor heads with built in temperature & humidity indicators, o-rings, barium chloride, special paper & thermally insulated styrofoam case.

Additional - Barium Chloride - 3 ounces - Cat. #BL-5803 \$6.95

Additional - Special Paper - 100 discs - Cat. #SP-5803 \$12.95

**\$285.00**



## MEASURE WATER ACTIVITY ( $a_w$ ) WITH GREAT EASE AND SIMPLICITY

Abbeon announces that its NEW Model 5803  $a_w$ -Value Analyzer is now in full production after extensive laboratory and field testing.

The Abbeon  $a_w$ -Value Analyzer Model#5803 is used to measure the "Water Activity" (free water) in meat, poultry, fish and other foods — either fresh or processed.

Bacteria need free water to grow; bacteria will not grow in a perfectly dry product. By measuring the "Water Activity" (free water), meat processors, sellers, inspectors and users can determine if the foodstuff under test can support the growth of potentially harmful bacteria. The  $a_w$ -Value Analyzer is primarily used to measure the free water content of meat and other food products normally sold or offered as "shelf-stable" — or not requiring refrigeration. The analyzer may also be used effectively to measure free water content of any foods for a variety of reasons such as studies on freezing techniques and other processing techniques.

For inspecting, selling, processing, or the study of meat, poultry, fish, an  $a_w$ -Value Analyzer will prove invaluable.

In general, bacteria will grow in materials with an  $a_w$

value of .86 or more and will not grow with values of .86 or less — assuming a temperature of 20°C and an appropriate pH value.

The operation of the analyzer is relatively simple. A cup sample of the product under test is put into a small, closed container. At the end of three hours at 20°C, the product has reached hygrometric equilibrium with the air above the sample. A precalibrated humidity indicator (hygrometer) built into the space above the sample now indicates the  $a_w$  value directly on an easily readable dial.

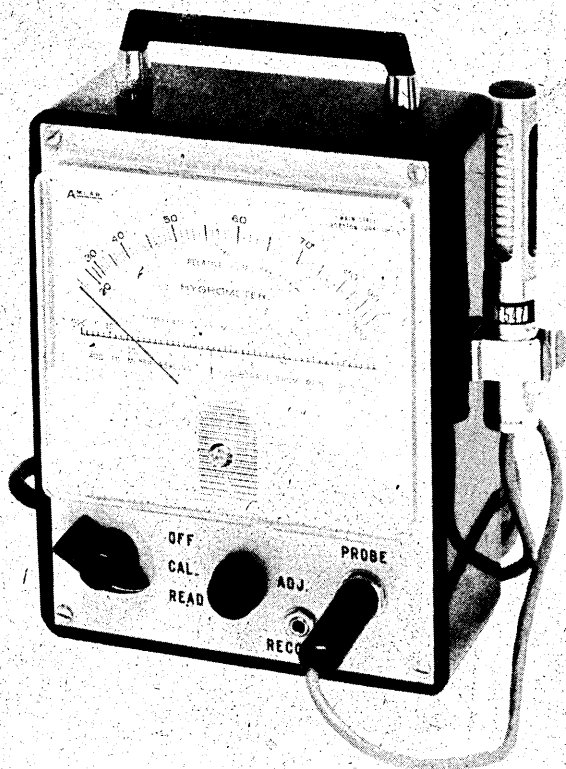
Calibration of the hygrometer is easily achieved by placing a Barium Chloride solution in the container, waiting three hours, and adjusting the  $a_w$  meter to read .90. It is well known from a multitude of tests that Barium Chloride at 20°C will come into hygrometric equilibrium with the air above it at a reading of .90 (relative humidity).

Model 5803  $a_w$ -Value Analyzer contains two complete analyzing containers and a thermally insulating expanded polystyrene case. Price is \$285.00.



## HYGROMETER

Electronic Direct Reading



### FEATURES:

- **SIMPLE ONE-STEP OPERATION** . . . . .
- **RAPID, DIRECT, READOUT** . . . . .  
Does not require psychrometric tables!
- **WIDE RANGE OPERATION** . . . . .  
Determines % R.H. over temperature range—20 to 80° C!
- **ACCURATE MEASUREMENT** . . . . .  
Over range 20 to 100% R.H.!
- **MULTIPLE SENSING** . . . . .  
With one instrument!
- **REMOTE READING** . . . . .  
To 1000'!
- **INTERCHANGEABLE SENSORS** . . . . .  
No recalibration required!
- **RECORDER OUTPUT JACK** . . . . .
- **EASY TO READ 4 1/2" METER**
- **FACTORY WARRANTY** . . . . .  
One year!

### APPLICATIONS

Measurement of relative humidity in processing of: Chemicals, Paints, Foods, Dyes, Wood, Paper, Pharmaceuticals.

Used in warehouses and storage bins, dry air for computers and other electronic equipment, and many other humidity sensitive areas.

### SPECIFICATIONS

#### HYGROMETER

Rugged, black plastic case (7" x 5" x 2") with handle, large 4 1/2" meter, 20 to 100% R.H. range with—20 to 80° C temperature correction, built-in voltage calibration check, output jack for recorder (50,000 ohm minimum impedance), 6' line cord. All components mounted on front panel.

Model HID 20—100 110 VAC 50/50 cyc

**\$286.00**

Shipping Wt. 4 lbs. 8 oz.

(SHIPPED COMPLETE WITH SENSOR)

#### SENSOR

Model HS1-6. Absorbent co-polymer with parallel resistance grids. Resistance changes directly with variation to relative humidity. Plastic housing 1" dia. x 3" lg. Supplied with 6' cable and connector.

10 foot, 25 foot, and 100 foot extension plugs in cables can be supplied at an additional charge.

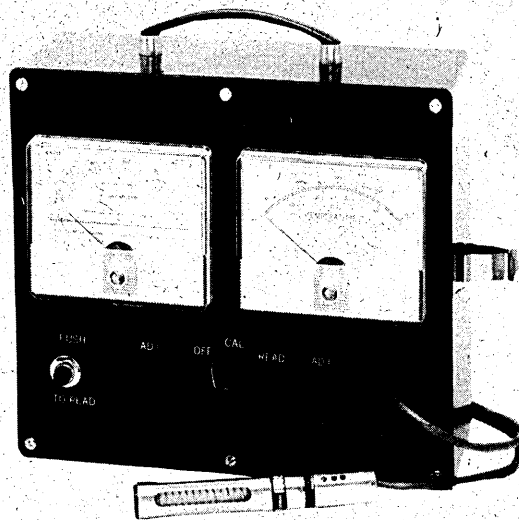
BATTERY OPERATED UNIT

MODEL PH1 **\$297.00**

SHIPPED COMPLETE WITH SENSOR  
SHIPPED FROM FACTORY, NEW JERSEY

## HYGRO-THERM

Electronic Direct Reading



### FEATURES

- **Relative humidity from 20% RH to 100% RH.**
- **Temperature range from—20° C to 80° C.**
- **Combined in one remote probe.**
- **Two recorder jacks available—for temperature and humidity.**
- **Voltage regulated.**
- **Accuracy ± 1% RH, ± 1/4° C. Temperature.**
- **Remote reading probes in varying lengths and shapes.**
- **Factory warranty for one year.**

#### MODEL HT-1

(ELECTRIC MODEL)  
115 VOLT AC-COMplete

**\$424.00**

#### MODEL PHT-1

(BATTERY OPERATED)  
COMPLETE-

**\$448.00**

### SPECIFICATIONS

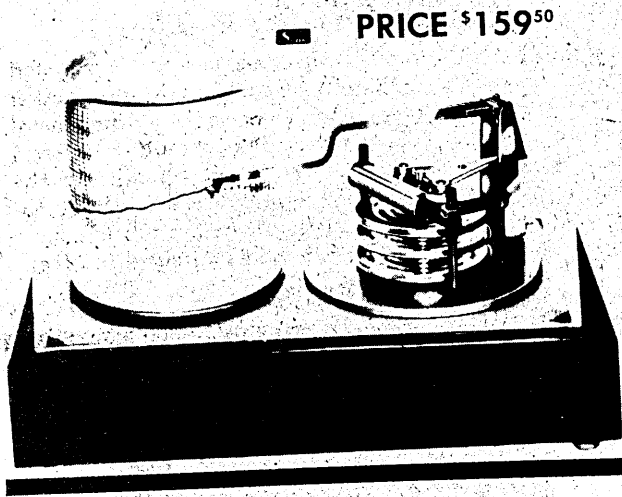
Black bakelite case (8" x 7" x 3") with plastic carrying handle. Two large, 3 1/2" meters, for separate indication of temperature and humidity. The humidity scale is 20% — 100% RH and the temperature range is —20° C to 80° C (0°-180° F). The humidity meter contains an easy conversion chart for humidities at all temperatures in the temperature range. A special Humidity-Dewpoint chart is included.

The Hygro-Therm is made with a built-in voltage control, thus eliminating voltage variations on the line—115 Vac.

Hygro-Therm probes are matched for speed in reporting. The humidity probe is a special co-polymer moisture vapor is absorbed on the surface of the probe, thus effecting the electrical resistivity of the sensor. This change in resistance is read-out as % Relative Humidity. The temperature probe is a thermistor. Temperature affects the resistance of the thermistor; this change in resistance is read-out on the meter in degrees Centigrade and Fahrenheit. The probes cannot be affected by common laboratory gases or increased pressure, and will report accurately any changes in humidity and temperature whether in or out-of-doors. Dust or dirt merely slow down the reporting time, the sensors may be washed with compressed air or distilled water.

SHIPPED F.O.B. FACTORY, NEW JERSEY

A One year factory warranty for factory caused, or originated, defects covers each instrument.



PRICE \$159<sup>50</sup>

### No. 8005-B ELECTRO-BAROGRAPH (BATTERY OPERATED)

To meet the demand for an accurate, moderately priced, compact recording barometer, Lufft has developed this outstanding instrument. Weighing only 3 pounds and easy to operate, this precision instrument is attractively styled and suitable for home, office or factory. The triple vacuum highly accurate mechanism is finished in a rich satin brass and mounted on a highly polished mahogany finished wood base with a removable clear plastic protective cover. The chart drum is activated by a readily available 1.5 volt battery easily installed in the base.

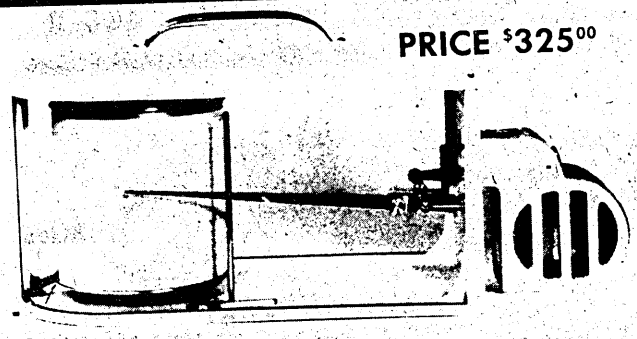
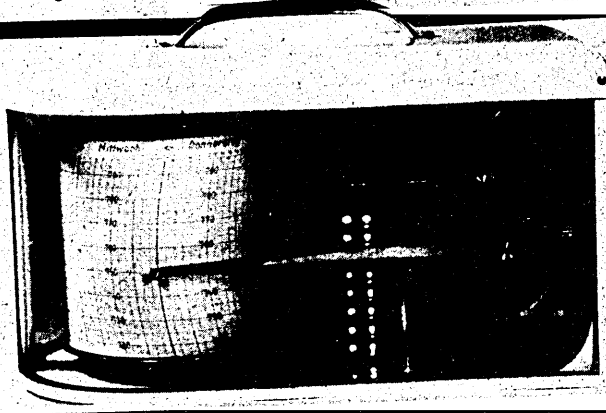
Every instrument is supplied with complete instructions, 1 battery and 1 year supply of charts and ink. A five year guarantee is supplied with each instrument.

Length: 8 inches Height: 5 inches Depth: 4½ inches  
Barometric range: 28 to 31 inches

### No. RMM-B BAROGRAPH

Precision compensated eight vacuum mechanism mounted in modern full view metal case with imitation mother of pearl finish and chrome carrying handle. First quality 8 day clock mechanism with drum revolving once in seven days. Standard measuring range 28 to 31 inches atmospheric pressure. Supplied complete with one year supply of charts and ink. Length: 10 inches, Width: 5½ inches, Height: 7½ inches.

PRICE \$345<sup>00</sup>



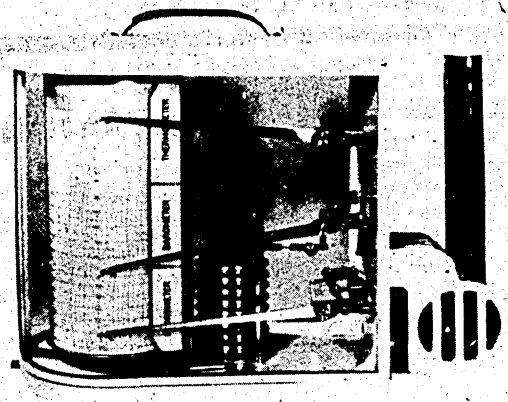
PRICE \$325<sup>00</sup>

### No. TB-B THERMOGRAPH (Recording Thermometer)

Very sensitive bimetallic element placed outside the case in protective shock proof guard. First quality 8 day clock mechanism with drum revolving once in 7 days. Mechanism is mounted in modern metal case with carrying handle with imitation Mother Pearl finish and full view glass panel.

Available with temperature ranges of +6 to 120°F; -20 to 120°F; +76 to 190°F. Supplied with one year supply charts and ink.

Length: 13¼ Inches Width: 5½ Inches Height: 7½ Inches



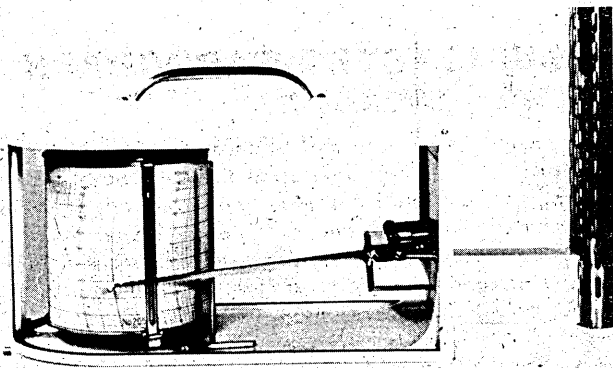
PRICE \$650<sup>00</sup>

### No. BTH-B METEOROGRAPH (Combined Recording Barometer - Thermometer-Hygrometer)

This instrument records air pressure, temperature and relative humidity on one chart. The precision "Durotherm" hygrometer element and the highly sensitive bi-metallic thermometer element are mounted outside the case in protected guards for the utmost in precision accuracy. The barometer is a compensated 8 vacuum mechanism. The modern metal case with carrying handle finished in imitation Mother of Pearl with full view glass panel. First quality 8 day clock mechanism with drum revolving once in 7 days. Supplied complete with one year supply of charts and ink.

Length: 13¼ Inches Width: 5½ Inches Height: 10½ Inches

Hygrometer range: 30 to 100% relative humidity.  
Thermometer range: Plus 8° to 134°F.



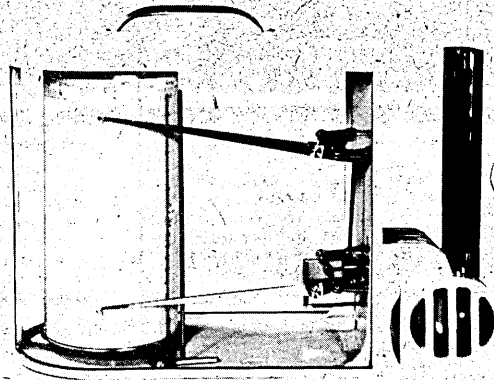
## No. RH-B HYGROGRAPH (Recording Hygrometer)

The precision "Durotherm" measuring element is mounted outside the case in a vertically mounted perforated basket for the utmost in accuracy and sensitiveness. Modern metal case with carrying handle with imitation Mother of Pearl finish. First quality 8 day clock mechanism with drum revolving once in 7 days. Measuring range 0 to 100% relative humidity. Supplied with one year supply of charts and ink. Length: 14 inches Width: 5 1/8 Inches Height: 9 Inches.

**PRICE \$339<sup>00</sup>**

## No. TH-B THERMO HYGROGRAPH (Combined Recording Thermometer and Hygrometer)

The "Durotherm" hygrometer element and highly sensitive bi-metallic thermometer mechanism are mounted outside the case in protected guards for the utmost in precision accuracy. First quality 8 day clock mechanism with drum revolving once in 7 days. Modern metal case with carrying handle and full view glass panel with imitation Mother of Pearl finish. Supplied complete with one year supply of charts and ink. Length: 13 1/4 Inches Width: 5 1/8 Inches Height: 10 1/2 Inches. Hygrometer range: 0 to 100% relative humidity Thermometer range: Plus 6° to 120°F.



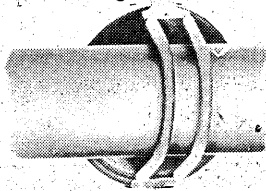
**PRICE \$425<sup>00</sup>**

## ABRAX PIPE THERMOMETERS

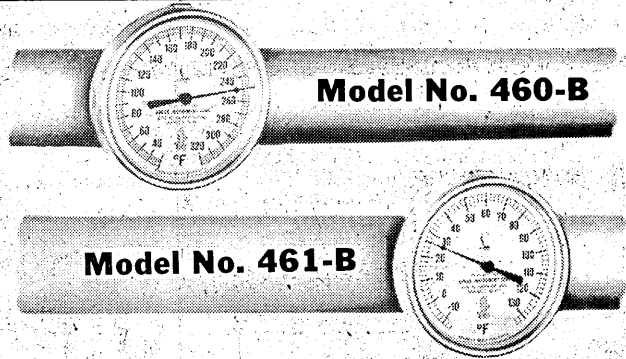
The Abrax Pipe Thermometers simply and easily clip to steam, water, refrigeration, gas and other pipes by means of twin spiral spring clips supplied with each instrument. These Thermometers can be attached or removed from the pipes in seconds and require no alteration, branching or drilling of the pipes.

Abrax Pipe Thermometers are precalibrated to counteract the possibility of error through heat losses by radiation or convection.

They can be used for all pipes up to 3 1/2" in diameter. The dials are 2 1/2" in diameter, silvered, with black figures and polished chrome casings. The Thermometers are graduated in 2° divisions.



**\$17<sup>95</sup>**



**Model No. 460-B**

**Model No. 461-B**

### (THE APFT 460 SERIES)

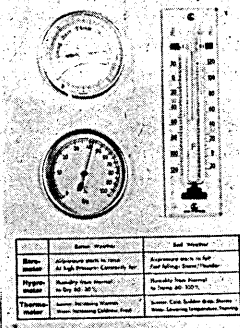
**FOR EASY READING OF PIPE SURFACE TEMPERATURE  
OVER 12,500 IN USE DAILY, 2 1/2" EASY TO READ DIAL  
CLIPS ON IN SECONDS WITH DUAL SPRING CLIP**

The Abrax Pipe Thermometers come in two temperature ranges:

**Model No. 460-B-range plus 32° to 320° F.**

**Model No. 461-B-range minus 14° to plus 134°**

## WEATHER SERVICE



## No. BK-B OUTDOOR WEATHER STATION

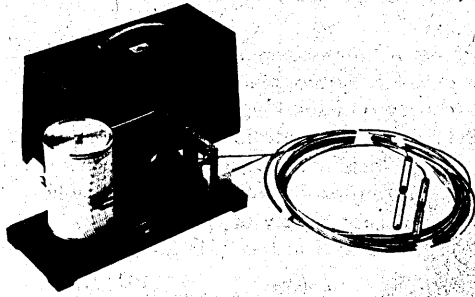
A very popular outdoor weather station suitable for gardens, resorts, factories, public buildings or advertising purposes. This weather station consists of a barometer, hygrometer and maximum-minimum thermometer mounted on a white weather-proof metal frame. Complete weather forecasting information is painted in black on the frame. The precision barometer and hygrometer have silvered dials, 4" in diameter with black graduations. Supplied complete with magnet and decorative mounting screws. Height: 16", width: 10".

**PRICE \$79<sup>50</sup>**

F.O.B. Warehouse California

WHEN ORDERING-PLEASE MENTION CATALOG NO. AND PAGE NO.

**NO. 3510 SERIES SINGLE AND DUAL POINT DISTANCE THERMOGRAPHS**



**DESCRIPTION**

The 3510 Series Single and Dual Point Distance Thermographs are used to accurately record the temperature of soil, air or water at a distance of 15 feet or 30 feet depending on the capillary selected.

The one and two pen systems record simultaneously on a single chart 4.75 inches in height with standard temperature ranges of 10°F to 120°F, 20°C to 40°C and -30°F to 80°F. With the 3510 two point distance thermograph, one trace is distinguished from the other by use of green ink in one pen and red ink in the other.

The thermal bulb and the capillary are fabricated from 347 stainless steel, the thermal bulb itself is 1/2 inch in diameter and 6 1/4 inches long. The linkages, pivots and all internal working parts are fabricated from 304 stainless steel, and operate in jewel olive hole bearings. The base is fabricated from aged tenzoly and the lid is fabricated from cold rolled steel. The unit is painted hammertone green.

This instrument can be provided with a long term strip chart attachment and long term inking system that will run for a 90 day period without changing the chart. The attachment will operate on one 1 1/2 volt "D" cell battery for approximately six months.

**SPECIFICATIONS**

<b>ACCURACY</b>	± 2%
<b>CALIBRATION</b>	10°F to 120°F, -30°F to 80°F, 20°C to 40°C (adjustable to any 110°F range between -40°F and +120°F)
<b>SENSORS</b>	Mercury activated, temperature compensated, type 347 stainless steel, 1/8" O.D. capillary tubing
<b>CAPILLARY LENGTH</b>	15' or 30' (other lengths available on special request)
<b>STANDARD CHART DRIVE</b>	Spring Wound (176 hour rotation) 11 jewel lever escapement.
<b>STANDARD CHART SIZE</b>	4 3/4" x 11 9/16"
<b>OPTIONAL CHART DRIVE</b>	2°F graduations 90 day strip chart, 1 1/4 VDC, 1/4"-hr. feed rate.
<b>OPTIONAL CHART SIZE</b>	4" height with one hour timing marks and 2°F graduations.
<b>STANDARD INK SYSTEM</b>	Stainless Steel pot pen (approximately 30 day capacity)
<b>WEIGHT</b>	(Single Point 15' capillary) 12 lbs.

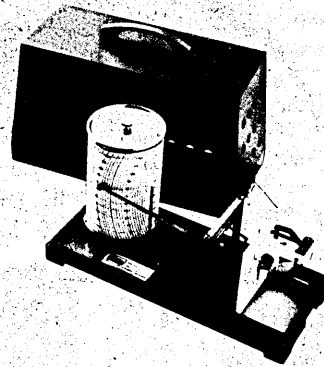
**ORDERING INFORMATION**

NO. 3510-15S SINGLE POINT THERMOGRAPH (15' Capillary)	\$363.00
NO. 3510-30S SINGLE POINT THERMOGRAPH (30' Capillary)	\$396.00
NO. 3510-15D DUAL POINT THERMOGRAPH (15' Capillaries)	\$484.00
NO. 3510-30D DUAL POINT THERMOGRAPH (30' Capillaries)	\$522.00
(The above are seven day drum rotation, include pen, ink and 100 charts)	
OPTIONAL 90 DAY STRIP CHART (add "LT" to Model No.)	add \$319.00
NO. 5025 BALANCED PRESSURE INKING SYSTEM	\$10.00

**CHARTS**

3500-W-HF 10°F to 110°F (176 hour rotation)	\$7.50/100
3500-W-LF -30°F to 80°F (176 hour rotation)	\$7.50/100
3500-W-C 20°C to 40°C (176 hour rotation)	\$7.50/100
3500-LT-HF 10°F to 110°F (90 day strip chart)	\$7.90/roll
3500-LT-LF -30°F to 80°F (90 day strip chart)	\$7.90/roll
3500-LT-C 20°C to 40°C (90 day strip chart)	\$7.90/roll

**NO. 3500 RECORDING THERMOGRAPH**



**DESCRIPTION**

This temperature recording instrument employs as its sensing element a bimetallic strip. The bimetallic strip is a constant moment device comprising of two dissimilar metals whose coefficients of expansion when subjected to temperature changes produce a tendency to bend along the length of the element. This bending movement is constant, therefore, a linear output is produced which is calibrated in temperature to read over a 4.75 inch chart height. A Dual bimetallic strip is used in this instrument to provide pen stability and a rapid response time.

**SPECIFICATIONS**

<b>ACCURACY</b>	± 1%
<b>RANGE</b>	110°F (adjustable between -40°F and +120°F)
<b>STANDARD CHART DRIVE</b>	Spring wound (176 hrs.) high quality movement with an 11 jeweled lever escapement.
<b>STANDARD CHART SIZE</b>	4 3/4" x 11 9/16", 2°F graduations
<b>OPTIONAL CHART DRIVE</b>	90 day strip chart, 1 1/4 VDC, 1/4" per hour feed rate
<b>OPTIONAL CHART SIZE</b>	4" height with 1 hour timing marks and 2°F graduations.
<b>STANDARD INK SYSTEM</b>	Stainless steel pot pen (approx. 30 day capacity).
<b>SIZE</b>	13" long, 5 3/4" wide, 9 1/2" high
<b>WEIGHT</b>	9 lbs.

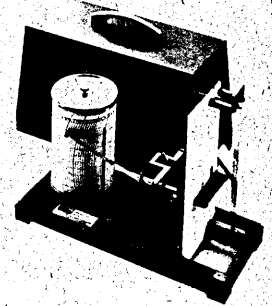
**ORDERING INFORMATION**

NO. 3500 THERMOGRAPH (176 hour drum rotation) includes pen, ink and 100 charts	\$196.00
NO. 3500LT THERMOGRAPH (90 day strip chart) includes pen, ink and one roll of chart paper.	\$511.00
NO. 5025 BALANCED PRESSURE INKING SYSTEM	\$10.00

**CHARTS**

NO. 3500 WHF (7 day, +10°F to 120°F)	\$7.50/100
NO. 3500 WLF (7 day, -30°F to +80°F)	\$7.50/100
NO. 3500WC (7 day, 20°C to +40°C)	\$7.50/100
NO. 3500-90 HF (90 day, +10°F to +120°F)	\$7.90/roll
NO. 3500-90LF (90 day, -30°F to +80°F)	\$7.90/roll
NO. 3500-90C (90 day, 20°C to +40°C)	\$7.90/roll

**NO. 2010 RECORDING HYGROGRAPH**



**DESCRIPTION**

Hair hygrometers are used widely to measure relative humidity. This instrument utilizes a seven inch human hair element as its sensor. The element, under tension, changes in length depending on the moisture content of the surrounding air, this change is amplified through mechanical linkage and is traced on a 3 1/2" high chart.

**SPECIFICATIONS**

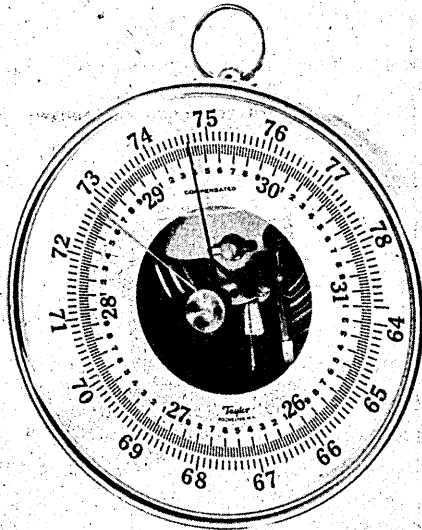
<b>ACCURACY</b>	± 3% between 15 and 90% ± 5% at extremes
<b>RANGE</b>	0-100% Relative Humidity
<b>STANDARD CHART DRIVE</b>	Spring wound (176 hours) high quality movement with an jewel lever escapement
<b>STANDARD CHART SIZE</b>	3 1/2" x 11 9/16", 2% R.H. graduations.
<b>OPTIONAL CHART DRIVE</b>	90 day strip chart, 1 1/4 VDC 1/4" per hour feed rate.
<b>OPTIONAL CHART SIZE</b>	3 1/2" high with one hour timing marks and 2% R.H. graduation
<b>STANDARD INK SYSTEM</b>	Stainless steel pot pen nib (approximately 30 day capacity)
<b>SIZE</b>	13" long, 5 3/4" wide, 9" high
<b>WEIGHT</b>	9 lbs.

**ORDERING INFORMATION**

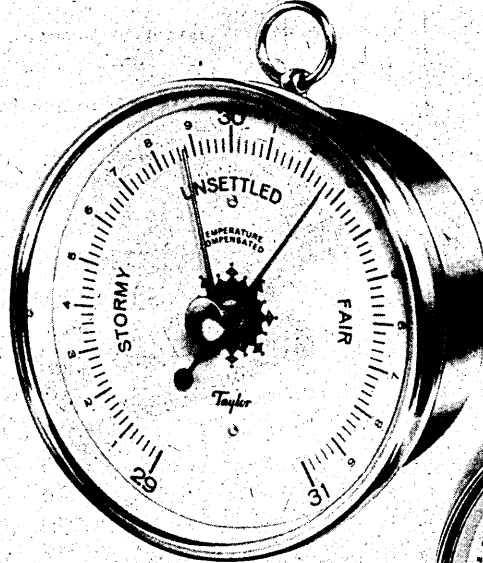
NO. 2010 RECORDING HYGROGRAPH (176 hour drum rotation, includes pen, ink and 100 charts.	\$195.00
NO. 2010LT RECORDING HYGROGRAPH (90 day strip chart, pen, ink and one roll of chart paper.	\$511.00
NO. 5025 BALANCED PRESSURE INKING SYSTEM	\$10.00

**CHARTS**

NO. 2010C (7 day, 0-100% Relative Humidity)	\$7.50/roll
NO. 2010CLT (90 day, 0-100% Relative Humidity)	\$7.90/roll



2250M



6204



2237

**2237 Brass Case Barometer**

Navy type. Heavy spun brass case, 6 1/4" flange. Off-white 5" metal dial. Top quality compensated movement. Range 26-31", indicates actual pressure between 0-3500 ft. Boxed, Wt. 2 lbs. 2 ozs.

**2237**

**2237M** Metric 66.0-78.7 CM, 0-0160M

**2237MB** Millibar, 850-1050MB

**2237C** Range 23-29". Pressure 2000-6000 ft.

**2237CM** Metric 58.4-73.6CM, 600-1830M

**2237D** Range 20-26". Pressure 4900-9500 ft.

ALL  
\$140  
EACH

**2075 Engineer's Barometer**

Chrome plated case; 3" dial reads to 6000 ft. in 20 ft. divisions. Leather carrying case. Boxed, Wt. 1 lb. 2 ozs.

**2075C**

**2075CM** Metric 58.4-73.6CM, 600-1830M

**2075D** Same, 10,000 ft. 50 ft. divisions

**2075DM** Metric 54.6-78.7CM, 0-3000M

**2075F** Same; 16,000 ft. 50 ft. divisions

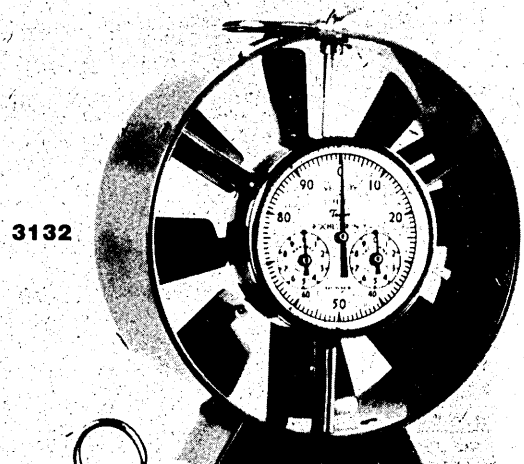
ALL  
\$275  
EACH

**3132 Biram's Anemometer**

For velocities 200 to 3000 feet per minute. Three dials reading to 10,000 feet. 4" diameter. Jeweled movement. Disconnector. Automatic zero set. In carrying case with correction chart. Boxed. Wt. 2 lbs.

**3132**

\$230



3132

**2250 Open Face Brass Case Barometer**

Best quality temperature compensated movement. Open faced, off-white 5" metal dial. Range 26-31", indicates actual pressure between 0-3500 ft. Boxed, Wt. 1 lb. 2 ozs.

**2250**

**2250M** Metric 66.0-78.7, 0-1060M

**2250MB** Millibars, 850-1050 MB

**2250C** Range 23-29" Pressure 2000-6000 Ft.

**2250CM** Metric 58.4-73.6 CM; 600-1830M

**2250D** Range 20-26". Pressure 4900-9500 Ft.

ALL  
\$140  
EACH

**6204 Brass Case Marine Barometer**

Heavy brass case. White enameled dial. 5 1/4". Exclusive fast-acting UNI/MAG<sup>®</sup> movement, correctable to sea level, up to 10,000 ft. Boxed, Wt. 1 lb. 2 ozs.

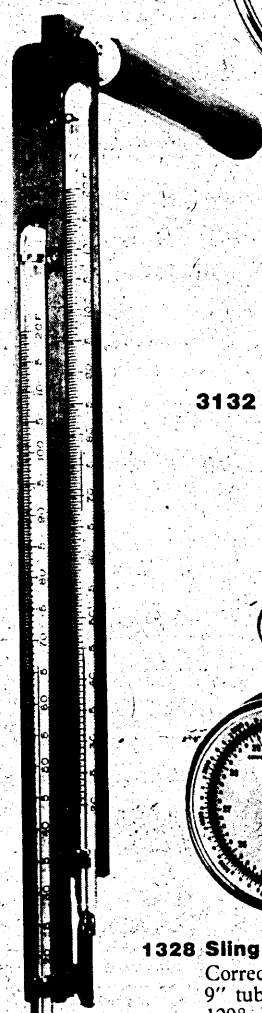
**6204**

\$60

**6204M** Same as 6204, with Inch and Metric dial, 740

\$60

to 785 millimeters



1328



2075D

**1328 Sling Psychrometer**

Correct scientific method for relative humidity. Recessed 9" tubes in metal frame. Folding swivel handle. 20°-120° F, 1° divisions. Boxed with spare wicks and instructions. Wt. 1 lb.

**1328**

\$28.00

**1328C** Range -5° to 50° C

\$32.00

**1327** Range 30°-200° F, 1° Div.

\$32.50

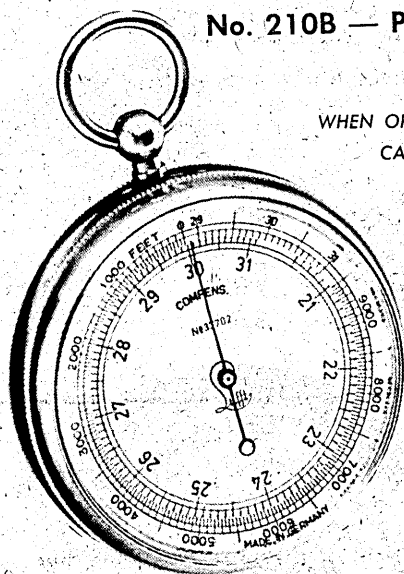
**1329** Range 25°-50° F, 1/10° Div.

\$36.00

F.O.B. Factory North Carolina

## No. 210B — POCKET ALTIMETER

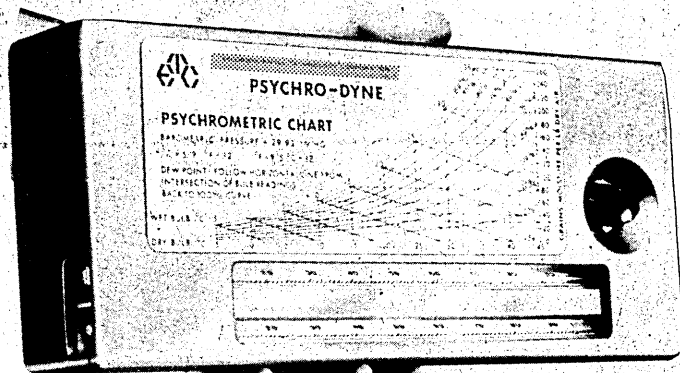
WHEN ORDERING — PLEASE MENTION  
CATALOG NO. AND PAGE NO.



The ideal instrument for the outdoor man. Polished chrome watch type case and precision compensated mechanism. The dial is graduated with both the altitude and weather scale so that this instrument can be used as an altimeter and also as a weather barometer. For precision accuracy each instrument is supplied with a test certificate. Complete in plush lined leather carrying case. Overall diameter 2".

No. 210C — 0' to 12,000 ft. range — PRICE \$112.50  
No. 210D — 0 to 16,000 ft. range — PRICE \$112.50

## PSYCHRO-DYNE™ BATTERY OPERATED PSYCHROMETER



### SPECIFICATIONS

**Psychrometric Tables:** +10°F to +140°F for relative humidity and dew point determination. -15°C to +44°C for relative humidity.

**Motor Speed:** 8,500 RPM. Current no load: 50 milliamperes. Type 4.5 volt, direct-current, permanent magnet.

**Response Time:** 1-1 1/2 to 2 minutes:

**Thermometers:** (a) Length: 8 7/8". (b) Fahrenheit Range: 0 to 120 degrees. Graduations: whole degrees. Accuracy: +0.3 degrees over entire range. (c) Centigrade Range: -15 to +45 degrees. Graduations: half degrees. Accuracy: +0.2 degrees over entire range.

PAGE 14

**Slide Rules:** +20° to 120°F or -7° to 49°C.

**Battery Life:** 1000 operations with three standard "D" cells.

**Instrument Measurements:** 10" long x 4 1/2" wide x 2" high.

**Carrying Case Measurements:** 12 1/4" long x 6 1/4" wide x 3 1/8" high.

**Weight:** Including carrying case less batteries, 2 1/2 lbs.

**Shipping Weight:** 3 lbs.

### MODELS & ACCESSORIES

Cat.		
No. 22010	—Psycho-Dyne (°F—mercury)	\$79.00
No. 22012	—Psycho-Dyne (°C—mercury)	80.00
No. 22014	—Psycho-Dyne (°F—organic)	80.00
No. 80014	—Thermometer pair (°F—mercury)	14.00
No. 80017	—Thermometer pair (°C—mercury)	14.00
No. 80018	—Thermometer pair (°F—organic)	14.50
No. 80033	—Slide Rule—(°C)	5.00 (pkg. of 2)
No. 80034	—Slide Rule—(°F)	5.00 (pkg. of 2)
No. 80046	—Spare Parts Kit—12" of wicking and 1 lamp	12.00 (pkg. of 4)

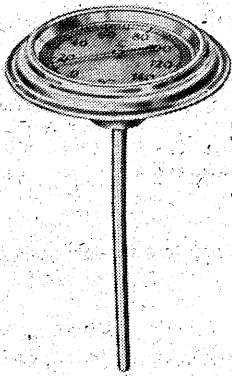
### ACCURATE—ECONOMICAL RH MEASUREMENT

The PSYCHRO-DYNE is a completely portable instrument which indicates wet and dry bulb temperatures for relative humidity and dew point determinations. The PSYCHRO-DYNE is designed and manufactured to rigid Weather Bureau and Navy specifications. It is completely self-contained in a high-impact molded case. The unit consists of a pair of matched precision thermometers, a permanent magnet fan motor, a plastic water bottle, an illuminating lamp and an on-off control. Also provided with each PSYCHRO-DYNE are an instruction manual, a humidity-calculator slide rule and a spare parts kit consisting of extra wicking and a lamp bulb. The instrument and accessories are supplied in a rugged, high-impact plastic carrying case.

### OPERATION

The wet and dry bulb method of measuring moisture in the air is based on the evaporative cooling effect of the wet bulb. The drier the air, the quicker the evaporation. This causes the wet bulb to depress in temperature until a balance takes place between the cooling effect and the normal heat gain from the ambient condition.

The PSYCHRO-DYNE requires no whirling or special techniques and may operate in confined areas. The operator adds water to the wick of the wet bulb, turns the fan on and allows aspiration to cause depression of the wet bulb temperature to a constant reading (approximately 2-3 minutes). From the wet and dry bulb readings the relative humidity can be determined from the psychrometric chart on the instrument cover, the slide rule provided with the unit, or from the charts included in the instruction manual. Night and dark space readings are facilitated by the illuminating light provided. Compared to conventional sling psychrometers, this method is safer, more convenient and eliminates the usual high breakage rate of thermometers.

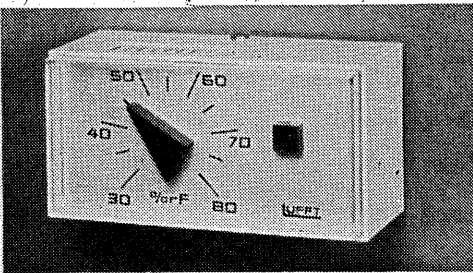


Attached by three screws put through the flat glass bezel.  
 Thermometer for installation with dip shaft for fitting into wells.  
 Length of dipshaft: 4" **\$40.20**  
 10" **\$46.60**  
 20" **\$54.15**

**Model #3047** 3" dial  
 Measuring range: -25 to +55°C  
 0 to +110°F  
 0 to +160°C

**#3048** 4½" dial  
 -10 to +130°F  
 +30 to +230°F  
 +30 to +320°F

Indicate length of dip shaft and temperature range.



### Lufft Room-Hygrostat

Turns Humidifiers or Dehumidifiers on or off at preset relative humidity levels. Switching differential approximately 3% relative humidity.

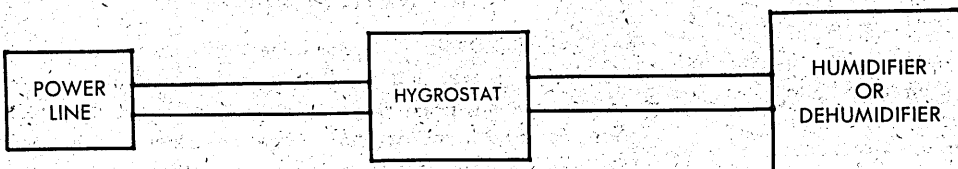
**Model 4721 \$113.50**

### Room Hygrostat

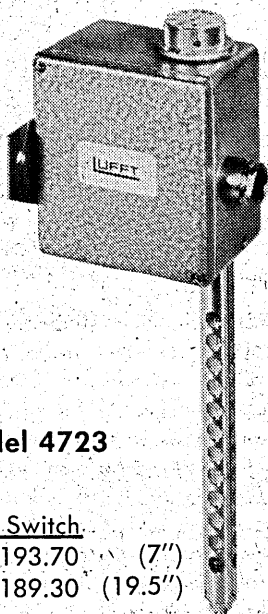


**Model 4720**

**\$105.80** with Cable & Switch



Both Units: Maximum:  
 Current — 10A  
 Volt — 250 VAC  
 Load — 1500 W



**Model 4723**

1 Switch 2 Switch  
 \$179.10 \$193.70 (7")  
 \$195.80 \$189.30 (19.5")

### Dipshaft Hygrostat

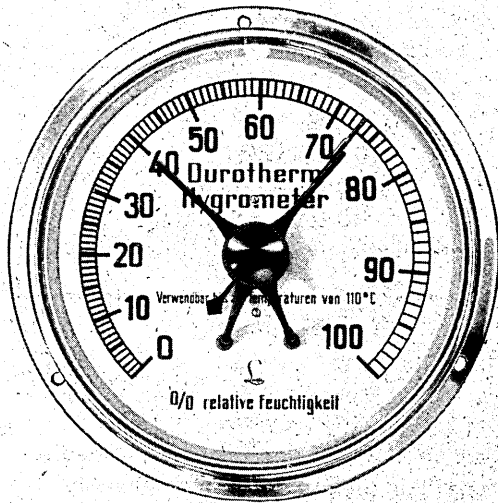
Model 4723 Dipshaft Hygrostat can be used to turn humidifiers or dehumidifiers on or off. Can be used at temperatures up to 240°F. A protective mesh guard is available which is placed over the shaft when the air velocity in the measuring area exceeds 5 meters per second.

The instrument can be mounted either horizontally or vertically. It can also be inserted through a wall so that it is not necessary to enter a controlled room to change the setting. The diameter of the dipshaft is 5/8". Available with shaft of 7" or 19.5" in length.

Measuring Range: 10 to 95% Relative Humidity  
 Switch Differential: 3% Relative Humidity

F.O.B. Warehouse California

# CONTACT HYGROMETERS



Our finest instruments. Have the same specifications as our popular model AB-167 except that these also have adjustable minimum and maximum switch contacts that close when the pointer hits the preselected values. The switch contacts have terminals on the rear of the instrument which can be wired through an appropriate relay to buzzers, alarms, lights, dehumidifiers or humidifiers. Note that the switch contacts can carry a maximum of 24 volts. For switching voltages of 110V or over, an appropriate relay must also be used. (See our RTV-15UI)

- 4703-600 Minimum Contact Only..... \$99.50 Chrome Case
- 4703-601 Maximum Contact Only..... \$99.50 Chrome Case
- 4703-602 Max and Min Contacts..... \$119.50 Chrome Case

#### Relay

110 Volt relay capable of handling 15 amps. 2" x 3" x 4". Sealed unit with accessible terminals. Use separate relays for maximum and minimum.  
Cat. #RTV-15UI

F.O.B. Factory California

**\$39<sup>95</sup>**

## Psychrometer model 5021 for humidity control

Useful as a standard, to calibrate our dial hygrometers.

Consisting of 2 mercury thermometers, stand, humidifying basin psychrometer

For humidity control in temperatures between 40° and 85° F

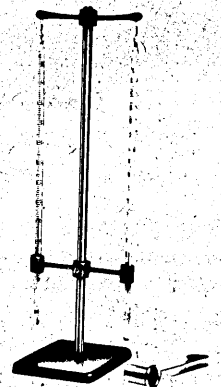
Thermometer range 32 to 120° F

Total height 400 mm

The instrument is easy to use. The dry and wet bulb thermometers are suspended on the stand and the wick on the right thermometer moistened by dipping it into the little container which should be filled with distilled water. The reading can be seen after 10 to 15 minutes when the wet bulb thermometer has reached its lowest evaporation value.

Putting these values on the enclosed slide rule yields the relative humidity.

Please note: This instrument only works accurately when used in temperatures between 40° and 85° F and in quiet air (no draft or wind)



Model 5021

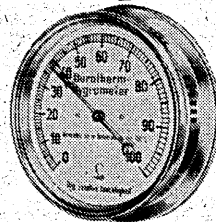
**\$79<sup>95</sup>**

### Model 4035—\$38.50

Range 0 to 100% Relative Humidity  
4" diameter scale

### Model 4036—\$39.30

5" diameter scale



## Sauna Hygrometer

Chrome Case

## Sauna Thermometer

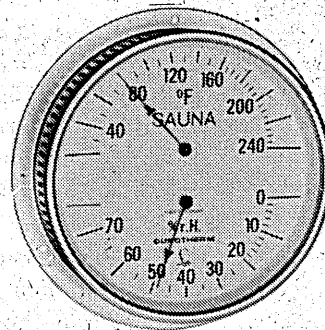
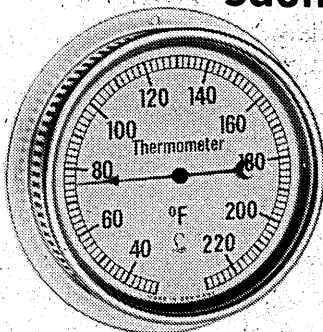
Chrome Case

### Model 3065—\$32.70

Range 30-230°F  
Also available 0-110°C  
4" diameter scale

### Model 3066—\$39.30

Range 30-230°F  
Also available 0-110°C  
5" diameter scale



## Sauna Climatometer

### Model 5030—\$64.50

We think this is the finest instrument ever made for installation in professional and home saunas. The brass finish is heavily chrome plated to resist atmospheric conditions that destroy less well made instruments. You will be pleased with the years of satisfaction that you can expect from the Sauna Climatometer.

Model 3065 Thermometer matches Model 4035 Hygrometer and Model 3066 Thermometer matches 4036 Hygrometer.

F.O.B. Factory California



## MODEL 2013 REMOTE READING RELATIVE HUMIDITY SYSTEM

A system for the measurement of relative humidity from a remote location. A revolutionary new (non-organic) sensing unit is employed in the transducer. This 'Hygro-Tel' (Pat. Pending) sensing element is not subject to deterioration with age as are many organic type sensors. A ceramic filter completely surrounds the element to retard the accumulation of dust, grime, etc. which tend to degrade the accuracy of any type sensor.

The transducer and associated electronics can be utilized for telemetry, etc. The output is computer compatible.

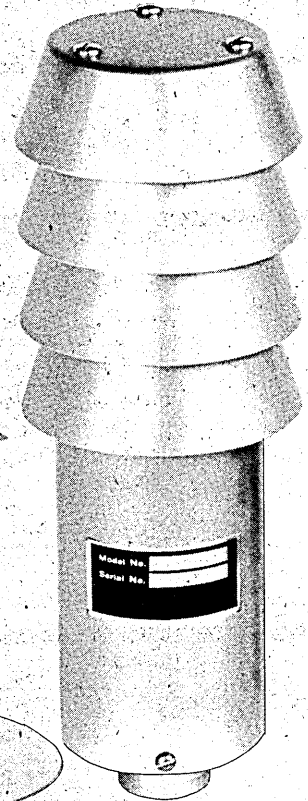
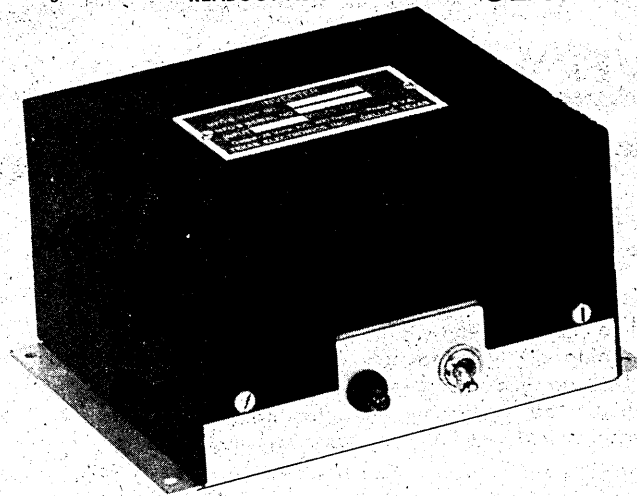
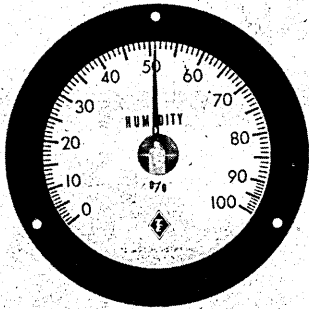
Super saturation of the 'Hygro-Tel' sensing element has no adverse effect on the accuracy of the system. Some electro chemical type sensors cannot accommodate humidities in the very high regions without future loss of accuracy in all ranges. The transducer housing is designed for outdoor installation, and no additional shelter or protection is necessary.

An output signal of  $\pm 100$  Ua. into a 1000 ohm load is obtained as follows: 0 current at 50% RH, -100 Ua at 0% RH, +100 Ua at 100% RH ( $\pm 0.1$  volts). Temperature range is 35 to 120 degrees F.

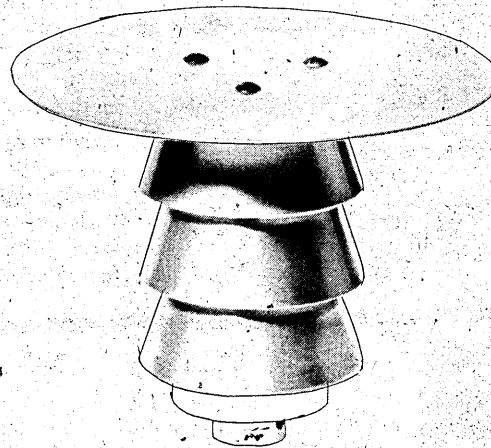
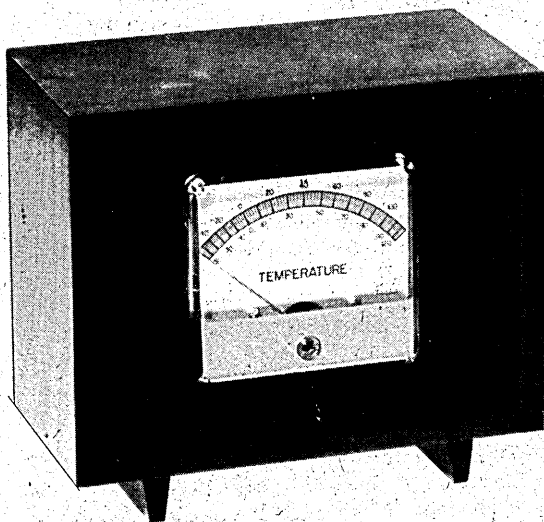
Input to system is 115 volts AC, 60 Hz. This input voltage is reduced, rectified, regulated and temperature compensated. This then supplies power to a 400 Hz inverter which in turn, energizes the primary of a linear differential transformer. The position of the core of this transformer is controlled by the Hygro-Tel sensing element. The output of the differential transformer is again rectified, and the resulting signal is applied to the read-out device.

Size — Transducer Housing: 3 1/4" dia. x 9" high  
Power Supply: 6 1/2" wide, 4 3/4" deep, 3 1/4" high

MODEL 2013 SYSTEM WITH  
READOUT AS SHOWN — \$620<sup>00</sup>



## MODEL 308 ELECTRIC TEMPERATURE SYSTEM



The electric temperature indicator reads temperature from remote locations. The sensing element may be located up to several hundred feet away from the indicator.

The sensor is mounted in an aluminum shelter which is sun shaded and ventilated so that it can be located in any exposed position. Installation is thus simplified in that no additional sensor protection is required.

The console contains the readout meter as well as the electronics. A printed circuit board, containing the solid state regulated power supply and other components, is mounted directly on the meter terminals so that the entire unit can be removed in one piece. This allows for simplified remounting in another panel if desired.

One hundred feet of two conductor plastic insulated connecting cable is normally supplied. This is a calibrated cable, hence it should not be either cut or spliced. If a cable length of other than 100 feet is required, it should be so specified so that it can be factory calibrated before shipment.

The system includes a solid state regulated power supply, read out meter with a range of -50 to +125 degrees F., hand rubbed walnut console, sensing unit housed in an aluminum shelter, plus 100 feet of interconnecting cable.

Dimensions: Console 7" high, 6" wide, 4" deep Sensor 7" dia., 6" high  
Weight: Console 2#. Sensor with cable 4#  
Shipping weight complete—10#  
Power requirements: 115 volts, 60 cycle, AC.

PRICE \$189<sup>40</sup>

F.O.B. Factory Texas

PLEASE KIND FRIEND MARK ON YOUR ORDER CATALOG NO.-AND PAGE NO.

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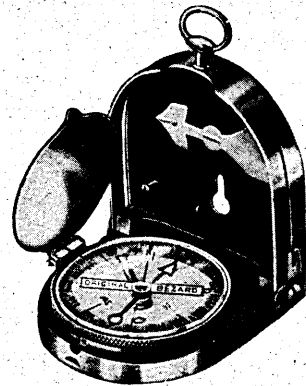
# MONEY BACK GUARANTEE

We guarantee 100% absolute satisfaction — no ifs — no ands — no buts — order what you wish — try them free for 10 days — if not completely satisfied return them without any obligation for full credit or refund.

## ON EVERY PRODUCT IN THIS CATALOG

### No. IIB "BEZARD" FLUID COMPASS

The original "Bezard" compass, named after its inventor, Colonel Von Bezard. This compass consists of an aluminum case and revolving card. The needle and card have luminous markings. A mirror is attached to the case whose support bears another marking for correct reading of the graduation. The protective lid is provided with azimuth arrow and sighting slit. This improved model is liquid filled with transparent bottom which facilitates map reading. Supplied complete with leather case, carrying cord, and detailed instructions.



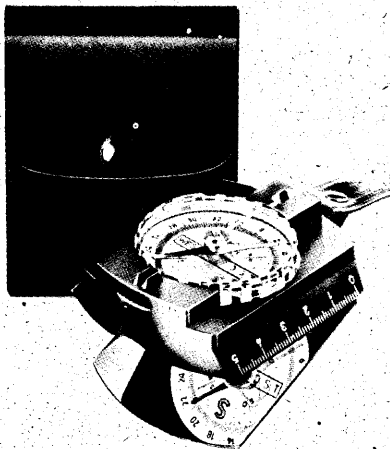
PRICE \$39<sup>50</sup>



### No. 11WB — "BEZARD" FLUID WRIST COMPASS

This is the famous "Bezard" Marching Compass made up into wrist compass. It is liquid filled with transparent bottom to facilitate map reading. This compass has an aluminum case and revolving dial. The outer rim is graduated from 0 to 360 degrees 2 degree division. Compass dial and needle have luminous markings. This compass is waterproof and rustproof and can be used for skindiving. Overall diameter 2 1/4".

PRICE \$30<sup>00</sup>



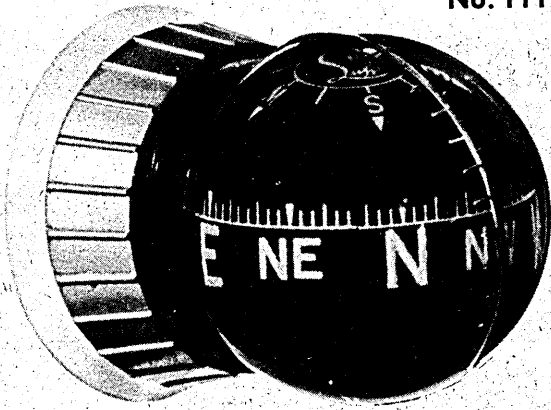
### NO. M106B FLUID FIELD COMPASS

A highly accurate professional type instrument. This model has a black metal case with a jeweled pivot and luminous markings and fluid filled transparent capsule. A hinged mirror is fitted to the base and stops at the correct position for reading and provides exceptionally good light at night. The image of the compass dial in the mirror is a true image and not an inverted or mirror image which you get in most compasses of this type. The mirror can also be tilted fully back for using the compass on a map. This compass also has an adjustable declination indicator which may be set according to the local magnetic declination and it is then used instead of the north point on the dial. Supplied complete with leatherette case and detailed instructions. Size 3 1/2" x 2 3/4".

PRICE \$26.50

F.O.B. Warehouse California

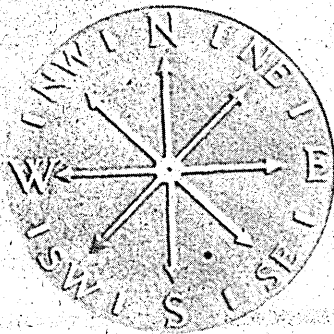
## No. PPPB — UNIVERSAL SPHERICAL FLUID COMPASS



The now world famous Luft Automobile Compass that may also be used for boat, airplane and camping. This outstanding instrument consists of a free floating black compass ball with white markings set into a clear round plastic case 2" in diameter with suction cup mounting and chrome locking ring. The outer transparent case has inclination markings with each mark equaling 10° inclination thereby enabling the user to determine the rate of climb or descent of any hill or grade. The free floating compass ball enables the compass to be mounted at any angle on the windshield. An outstanding feature is that this compass does not require any compensation when properly installed in accordance with the instructions supplied with each instrument. This compass is completely vibration free, waterproof, rust proof and unaffected by heat or cold.

**PRICE \$16.50**

## BRONZE COMPASS INDICATORS



These are two of the most popular models found in many beautiful gardens throughout the country. They are ordinarily set in a cement sidewalk, garden, or some other choice spot where they lend charm to their surroundings. These compass indicators are made in solid bronze and will last a lifetime. Each indicator is furnished with screws for fastening.

No. 151B — 8" Diameter — PRICE \$29<sup>50</sup>

No. 109B — 12" Diameter — PRICE \$77<sup>50</sup>

## BRONZE SUN DIALS

Sun dials give approximate sun time (apparent time). They make a most attractive addition to the old fashioned garden, or some such spot where the message conveyed on their faces may bring back pleasant memories. These sun dials are cast in solid bronze and they will last a lifetime. They are inscribed with Browning's famous quotation, "Grow old along with me. The best is yet to be."

No. 934B — 7 1/2" Diameter — PRICE \$38<sup>50</sup>

No. 979B — 11" Diameter — PRICE \$77<sup>50</sup>



## No. 6103B AUTO ALTIMETER

Smartly styled to make a worthy addition to any car be it luxury limousine, sports car, compact or hot-rod. This precision instrument has a temperature compensated mechanism which is set into a modern case with a black crackle finish. The 2 3/8" diameter dial is jet black with white graduations and red indicator hand. The instrument stands 3 1/2" high with a strong pressure sensitive adjustable base that will adhere to any surface. The altitude range is from 0 to 12,000 feet with 100 foot divisions.

**PRICE \$47.50**



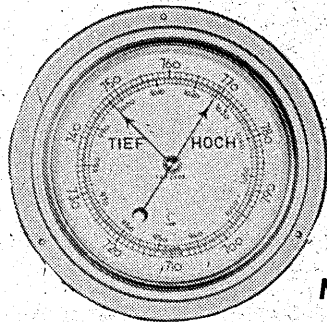
F.O.B. Warehouse California

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## THE FINEST

If you are looking for the top quality instruments, we recommend the ones shown on the following pages. There may be finer instruments made somewhere in the world than those produced under the trademark LUFFT—but if there are, we have not seen them.



### MARINE BAROMETER

Marine Barometer, temperature compensated, brass or chrome case.  
6" dia., overall

MODEL #2037

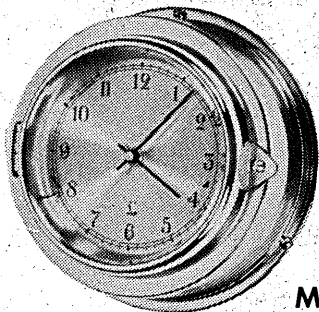
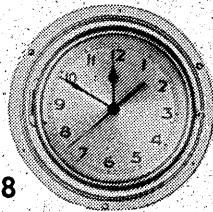
PRICE \$168.70

### MARINE CLOCK

Marine Clock, 6" dia. overall, 8 day movement, Swiss precision anchor escapement, hinged glass, steam-tight.

PRICE \$226.60

MODEL #2038



### MARINE CLOCK

Marine clock, 3 1/4" dia. scale, hinged glass with electro-movement, (battery 1.5 V). Chrome or brass.

MODEL #2132

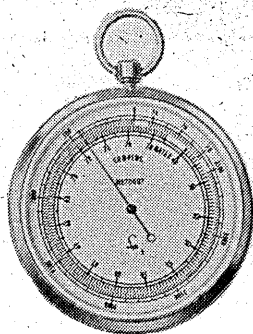
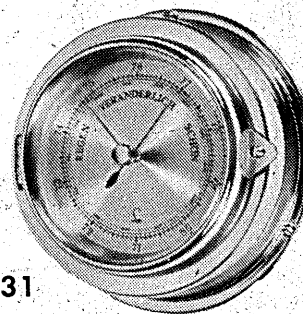
PRICE \$95.80

### MARINE BAROMETER

Marine Barometer, 3 1/4" dia. scale, hinged glass, brass or chrome case.

PRICE \$65.60

MODEL #2131



### ALTIMETER

Measuring Ranges	Altitude Division	Barometer Division
0-12,000 ft	100:100 ft	0, 1:0, 1 in.
0-16,000 ft	100:100 ft	0, 1:0, 1 in.
0-20,000 ft	100:100 ft	0, 1:0, 1 in.

Model D60

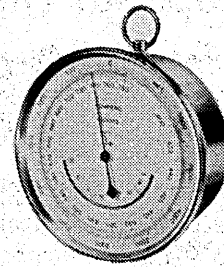
PRICE \$198.90

F.O.B. Warehouse California

Pocket Altimeter Model D60  
Instrument with barometric division and outer adjustable altitude dial, movement temperature compensated. Complete with Test Certificate and leather carrying case. Chrome case, 2" diameter.

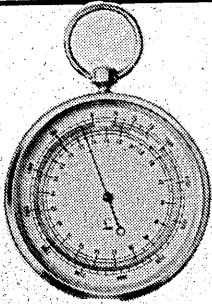
## ALTIMETER MODEL D255

<u>Measuring Ranges</u>	<u>Altitude Division</u>	<u>Barometer Division</u>
0-3300 ft	15:15 ft	0, 025:0, 025 in
0-9500 ft	50:50 ft	0, 05:0, 05 in
0-16,000 ft	100:100 ft	0, 1:0, 1 in
0-26,000 ft	100:100 ft	0, 1:0, 1 in



**\$415.00**

Instrument with barometric division and outer adjustable altitude dial. Movement temperature compensated. Mercury thermometer on dial. Complete with maxima sling thermometer, Test Certificate and leather carrying case. Chrome case, 4" diameter.



## Pocket Altimeter Model 200

**\$120.80**

<u>Measuring Ranges</u>	<u>Altitude Division</u>	<u>Barometer Division</u>
0-12,000 ft	100:100 ft	0, 1:0, 1 in
0-16,000 ft	100:100 ft	0, 1:0, 1 in

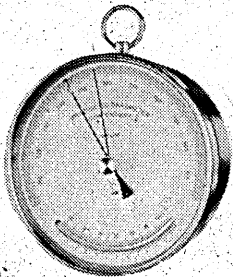
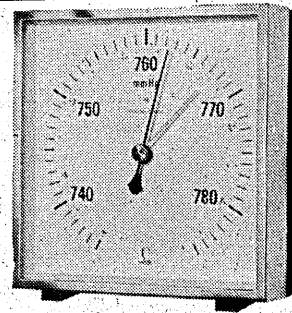
Instrument with barometric division and outer adjustable altitude dial. Complete with leather carrying case. Chrome case, 2" diameter.

## Model 2158 Barometer

Chrome case with white dial for use on wall or desk.

**\$48.50**

**MODEL 2158**



## Model 2039 Precision Barometer

Barometer for measuring the absolute pressure. Compensated movement, division  $\frac{1}{2}$  mm Hg 705-815 mm = 27-32". Thermometer: 14 - 131°F.

**MODEL 2039**

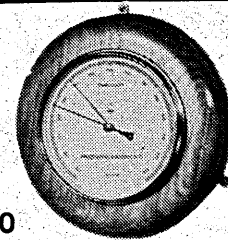
**\$337.40**

## Model 2040 Precision Barometer

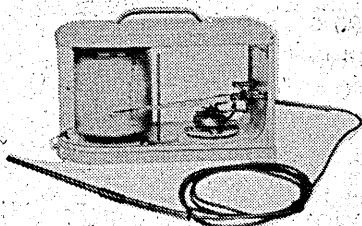
Precision Barometer for measuring the absolute pressure. Compensated movement. Division  $\frac{1}{2}$  mm Hg. Measuring Ranges 690-830 mm Hg. Normally for all altitudes up to 450 m.

**\$324.90**

**MODEL 2040**



F.O.B. Warehouse California



**MODEL TF**

## Model TF Thermograph with Capillary Distance Tube

Metal case with full-view paneling. Best quality 8-day clockwork wound up by hand. Drum revolves once in 7 days on in 24 hours. Writing height of paper is 80 mm. Flexible capillary distance tube of normally 2 meters.

Normal measuring range: +6 . . . +120°F  
-20 . . . +43°C

**\$729.00**

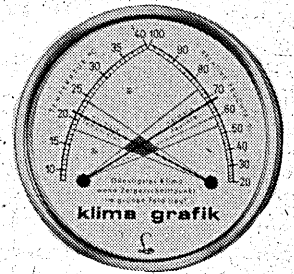
## Special Thermo-Hygrometer for the Graphics Industry.

Measuring range: 20 to 100% Relative Humidity  
+8 to +40°C

**\$45.90**

Available in German language only.

This Thermo-Hygrometer (with Durotherm Measuring element) clearly shows ideal temperature and ideal relative humidity. This is indicated by the intersection of the pointers in the green area, or for printing offices below the dotted line in the green area.



**Model 5031**

## Polymer Model 5001

The Polymer indicates temperature, relative humidity, dew point, saturation pressure, vapor pressure, saturation deficit, absolute humidity.

Hygrometer: 0 to 100% rel. humidity

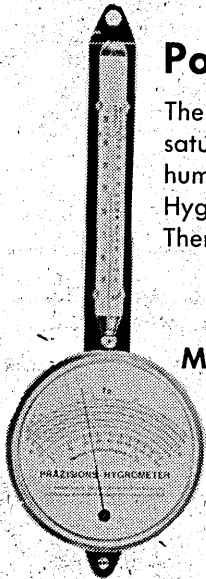
Thermometer: -30 to +50°C

-30 to +100°C

-10 to 120°F

**MODEL 5001**

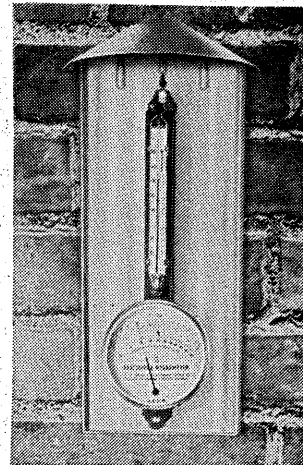
**\$47.50**



**MODEL 0005**

## Protective case for Polymer: **\$35.40**

For outdoor use, we suggest our protective metal case (full view on the instruments). The polymer is protected against rain, etc.)



## PLUVIOMETER according to Prof. Hellmann

Consists of collecting basin, lacquered in ivory color. 12" high, 4 1/2" diameter, inclusive of lower unit.

Collecting area 100 cm<sup>2</sup>, collecting funnel of sheet zinc with bracket of aluminium and graduated measuring glass with bottom for ice. Content of glass 250 cm<sup>3</sup> equal to 25 mm of precipitation.

**MODEL 0001**

**\$49.95**



## Maximum/Minimum Thermometer

Weatherproof plastic housing in ivory color. Lead-back of markings by push-button. Available in Centigrade or Fahrenheit.

**\$14.95**

(Specify Centigrade or Fahrenheit)

**MODEL 3904**

