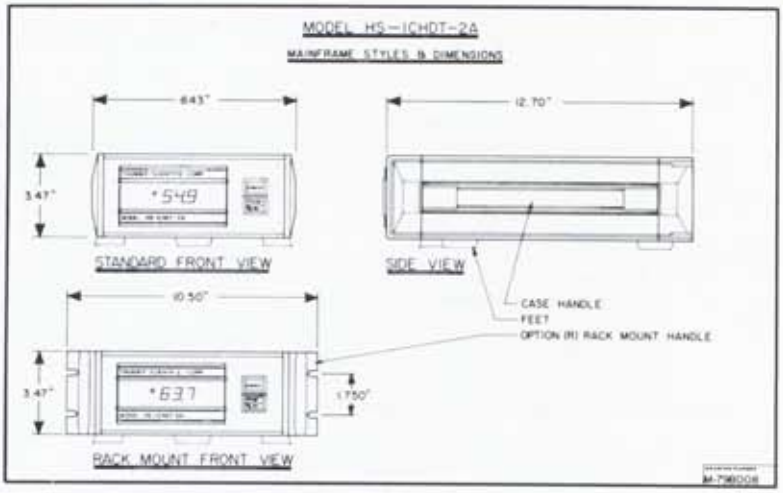
MODEL HS-1CHDT-2A AND HS-2CHDT-2A

DIGITAL HUMIDITY/TEMPERATURE MEASUREMENT SYSTEM



THE HS SERIES RELATIVE HUMIDITY AND TEMPERATURE MEASUREMENT SYSTEMS ARE AVAILABLE IN A SINGLE-CHANNEL SYSTEM (HS-1CHDT-2A), OR A DUAL-CHANNEL SYSTEM (HS-2CHDT-2A), CONSISTING OF TWO INDEPENDENT CHANNELS OF RELATIVE HUMIDITY AND TEMPERATURE.

EITHER SYSTEM PROVIDES THE USER WITH A SIMPLISTIC APPROACH TO A ONCE DIFFICULT MEASUREMENT (RELATIVE HUMIDITY). RH AND TEMPERATURE VALUES ARE READ DIRECTLY FROM THE FRONT PANEL METER, ELIMINATING THE NEED FOR CALIBRATION CURVES AND COMPLICATED TABLES.

QUALITY-CONTROL PROCEDURES DURING CALIBRATION AND ALIGNMENT OF THE COMPLETE SYSTEM GUARANTEE ACCURACY AND PERFORMANCE IN THE MOST DEMANDING ENVIRONMENTS. CONTINUOUS ANALOG OUTPUTS FOR BOTH PARAMETERS ARE TERMINATED AT THE REAR PANEL. BCD OUTPUTS ARE AVAILABLE AS AN OPTION FOR EITHER SYSTEM.

THE MAIN FRAME IS OF LIGHTWEIGHT STEEL AND ALUMINUM CONSTRUCTION, DESIGNED FOR FIELD MEASUREMENTS OR HEAVY USE LABORATORY APPLICATIONS.

SPECIFICATIONS

PARAMETER: — **SENSOR:**

RELATIVE HUMIDITY: ..... BR-101B CONTAINED IN A SEALED PROBE ON A SIX-FOOT CABLE.
RANGE: ..... 0-100%RH.
TEMPERATURE: ..... COMPENSATED 0°C TO 50°C.
ACCURACY: ..... ±4%RH TYPICAL ±2%RH.
READOUT: ..... DIRECTLY IN PERCENT RH.

TEMPERATURE:

YELLOW SPRINGS INSTRUMENTS THERMILINEAR COMPONENT INTEGRATED WITHIN THE BR-101B ENCLOSURE.
RANGE: ..... –30°C TO +50°C OR –22°F TO +122°F.
LINEARITY: ..... .16°C.
RESOLUTION: ..... 0.1°C.
READOUT: ..... DIRECTLY IN DEGREES C OR F.

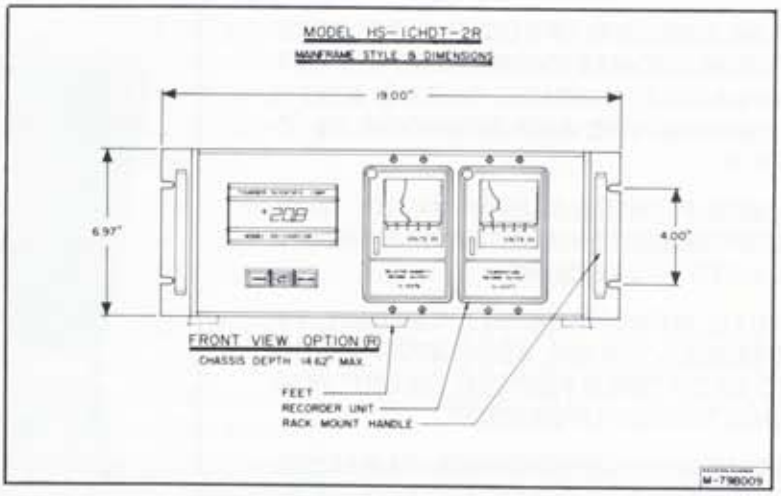
DIGITAL READOUT:

RESOLUTION: ..... 0.1%RH — 0.1°C.
DISPLAY: ..... .550 INCH GAS DISCHARGE.
CIRCUITRY: ..... ALL SILICON SOLID-STATE.
OPERATING TEMPERATURE: ..... 0°C TO 55°C.
ANALOG OUTPUT CONTINUOUS: ..... 0 TO 1 VDC LINEAR ANALOG OUTPUT FOR RECORDING % RELATIVE HUMIDITY (10 MV/%RH) 10 MV/°C OR °F.

RECORDERS: ..... RUSTRAC-STYLE, MODEL 288 — MOUNTED IN FRONT PANEL.

MODEL HS-1CHDT-2R AND HS-2CHDT-2R

DIGITAL HUMIDITY/TEMPERATURE MEASUREMENT SYSTEM WITH CONTINUOUS CHART RECORD



THE HS-1CHDT-2R DIGITAL HUMIDITY AND TEMPERATURE SYSTEM WITH CONTINUOUS CHART-STYLE RECORDING SUPPLIES THE OPERATOR WITH A COMPLETE DATA LOGGING SYSTEM PACKAGED IN A TRANSPORTABLE CASE. THE SYSTEM PROVIDES SWITCHABLE READOUT OF BOTH RELATIVE HUMIDITY AND TEMPERATURE IN DIRECT ENGINEERING UNITS. THE DESIGN INCORPORATES THE USE OF TWO RUSTRAC-STYLE STRIP CHART RECORDERS FABRICATED INTO THE FRONT PANEL. TWO INDEPENDENT RECORDER POWER SWITCHES ARE SUPPLIED FOR RECORDER OPERATION, AS NEEDED FOR BOTH % RH AND TEMPERATURE.

THE DUAL-CHANNEL MODEL HS-2CHDT-2R ENHANCES THE PERFORMANCE CAPABILITIES AND USEFULNESS OF TWO INDEPENDENT RELATIVE HUMIDITY AND TEMPERATURE PROBES. THIS FEATURE COMBINES THE TWO INPUTS, RELATIVE HUMIDITY AND TEMPERATURE, ON A SINGLE CHART. THIS IS ACCOMPLISHED BY THE SYNCHRONOUS SWITCHING OF TWO INPUTS TO PRODUCE TWO INDEPENDENT CHART TRACES. ONE TRACE IS A SOLID LINE AND THE OTHER IS AN INTERRUPTED (DOTTED) LINE USING THE FULL CHART WIDTH FOR EACH PARAMETER.

PARAMETER SELECTION MODE: ..... MANUAL BACKLIGHTED PUSHBUTTON.
POWER REQUIRED: ..... 115 VAC ±10% 50-60 Hz 15 WATT MAX.
SIGNAL CONDITIONING: ..... LINEAR SIGNAL PROCESSOR — 2300-H1-T11 (OR SPECIFY) SUPPLIED WITH 30 FT. POWER/SIGNAL CABLE.
CONNECTORS: ..... BENDIX-STYLE, ENVIRONMENTALLY SEALED.
PHYSICAL: ..... PORTABLE CASE SUPPLIED WITH DUST COVER, TILT STAND AND SIDE HANDLES.

SIGNAL CONDITIONER: ..... 2300 — SEE SPEC SHEET PAGE (8)
SENSOR CABLE: ..... SEE MECHANICAL SUPPLEMENT, BACK COVER
CALIBRATION CYCLE: ..... 1 YEAR.
ACCESSORIES SUPPLIED:
30 FT. POWER/SIGNAL CABLE BENDIX-STYLE CONNECTORS.
6 FT. SENSOR CABLE WITH 90 MICRON STAINLESS STEEL SINTERED FILTER FOR SENSOR PROTECTION.
1 EA. ANALOG OUTPUT CONNECTOR

ORDERING INFORMATION:
HS-1CHDT-2A, DIGITAL HUMIDITY/TEMPERATURE MEASUREMENT SYSTEM
HS-2CHDT-2A, DUAL CHANNEL RH/TEMP MEASUREMENT SYSTEM
HS-1CHDT-2R, DIGITAL HUMIDITY/TEMPERATURE MEASUREMENT SYSTEM WITH CONTINUOUS CHART RECORD
HS-2CHDT-2R DUAL CHANNEL, WITH CONTINUOUS CHART RECORD

OPTIONS AVAILABLE:
OPTION (R) RACK MOUNT BRACKETS
OPTION (01) 100 FT. POWER/SIGNAL CABLE
OPTION (03) BCD OUTPUT
OPTION (04) EXTRA FILTER ELEMENTS
OPTION (05) EXTRA ROLLS OF CHART PAPER