

Humidity Transducer Model HU-222

FEATURES:

- 100% solid state
- Linear and temperature compensated output
- Available with $\pm 5\%$, $\pm 3\%$ or $\pm 2\%$ RH accuracy over 0-100% RH range, and $\pm 1\%$ over 30-80% RH range
- Fast and accurate response to change in humidity
- Calibration not affected by moisture saturation, air flow, dust, or other common contaminants
- Available in four different enclosures for space, duct, outside and remote RH monitoring

DESCRIPTION:

The HU-222 uses a 100% solid state copolymer wafer with a bonded layer of hygrometric material on both surfaces. A change in humidity causes the surface resistance to change resulting in a rapid and accurate response. Since humidity is detected only by *adsorption*, the transducer reacts instantaneously to even a minute change in humidity.

Signal conditioning and temperature compensation are performed by industrial quality integrated circuits to provide a linear high level output featuring low hysteresis, excellent repeatability, and long-term stability.

Unlike other electro-chemical humidity sensors, high air flow, power interruption, dust, or high humidity will not affect performance. The transducer is 100% solid state and requires no periodic maintenance or calibration. Custom calibration of output and accuracy is also available.

APPLICATIONS:

- Air Ducts
- Outside Air
- Clean Rooms
- Air Handlers
- Computer Centers
- Laboratories
- Office Buildings
- Production Areas
- Paper Storage Rooms
- Grain Silos
- Food Processing Plants
- Green Houses
- Environmental Chambers

ORDERING INFORMATION: HU-222-

OUTPUT	ACCURACY	ENCLOSURE	SUPPLY VOLTAGE
1) 0-1VDC	1) $\pm 3\%$ FS	1) Space	A) 24VDC
2) 0-5VDC	2) $\pm 2\%$ FS	2) Duct	B) 24VAC
3) 0-10VDC	3) $\pm 1\%$ (30-80% RH)	3) Remote Probe	C) 115VAC
4) 4-20mA	4) $\pm 5\%$ FS	4) Outside Air with Weather Shelter	D) 12VDC
5) 1-50KHz AFCP			E) Custom
6) Custom			

HU-222

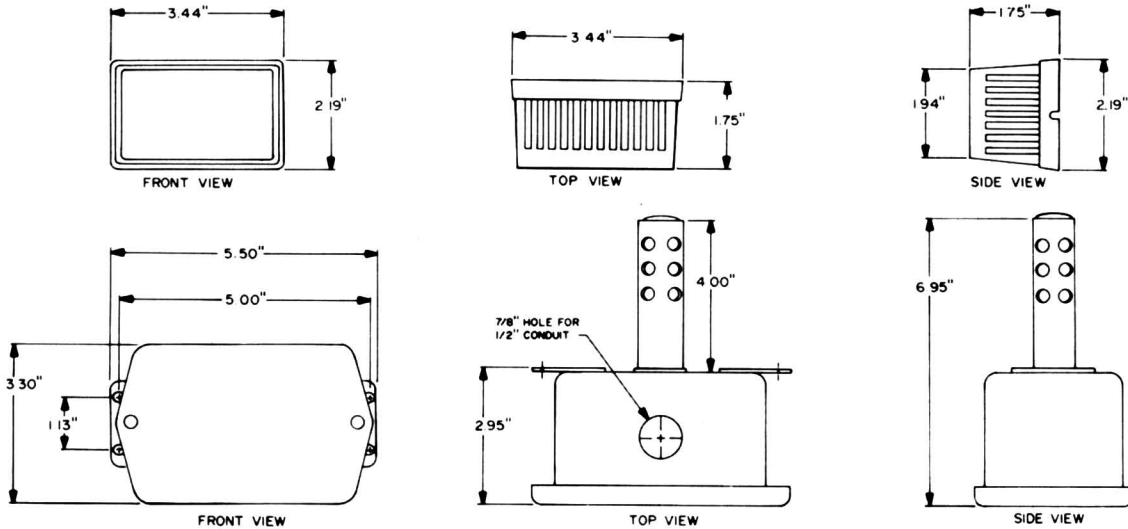
SPECIFICATIONS:

Range:
0-100% RH

Temperature Range:
-50°F - +150°F

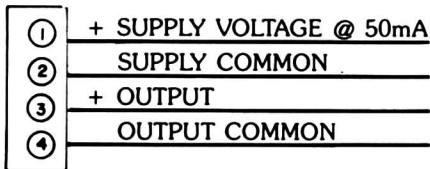
Response Time:
30 seconds (60% change)

Enclosure:
16 gage steel or polystyrene plastic

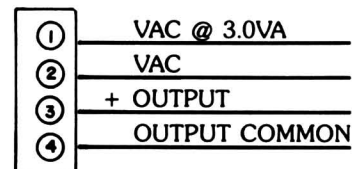


TERMINATION:

I. D.C. SUPPLY VOLTAGE



II. A.C. SUPPLY VOLTAGE



NOTES:

- All VAC/VDC 4-20mA output units are available for 2 wire current loop compatibility.
- Supply voltage should not exceed 24 VAC/VDC.
- On VAC units do not ground AC supply voltage.
- On VDC units only, supply common and output common are the same.

A Complete Line of Transducers From a Single Source

Space Temperature
Duct Temperature
Water Temperature
Outside Temperature
Duct Avg Temp
Strap-On Temp
Remote Temperature
Space Avg Temp
Differential Temp
Space Humidity
Duct Humidity
Outside Humidity

Remote Humidity
Temp & Humidity
Motor Current
Voltage
Pneumatic Pressure
Steam Pressure
Water Pressure
Air Pressure
Duct Static Pres
Bldg Static Pres
Filter Pres Drop

Compressor Head Pres
Compressor Suction Pres
Chiller Head Pres
Chiller Suction Pres
C W Flow
H W Flow
Steam Flow
Gas Flow
Tank Level
Rainfall
Windspeed

Wind Direction
Barometric Pressure
Air Flow
Water Alert
Ambient Light
Outside Light
Damper Control
Mixing Valve Ctrl
Vane Control
Soil Moisture
Setpoint Control
Local Indication

All Mamac Transducers Are Directly Compatible To:

Advanced Electrical Appl.
Advanced Micro Systems
Aegis
Allan Bradley
American Auto-Matrix
Andover Controls
AT&T
Atlantic Energy Tech
Automated Logic
Barber-Colman
Butler Controls
Carrier-Bldg Auto Sys

CESCO
Climatron
Computer Science
Control Pak Corp
Control Systems International
Detection Systems
Eagle Signal
EDA Sims
Elemco Prime Energy
Encon Systems
Facilitec

Functional Devices
General Electric
Hewlett Packard
Honeywell
HSQ Technology
Hypertek
Johnson Controls
Leviton
Litton FMS
Margaux Controls
MCC Powers

Micro Control Sys
Mosler
Novar Controls
Oak Adec
Opto 22
Paragon Electric
Powerline Comm
Radix II
Raytheon
Robertshaw Controls
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