



MEASUREMENT SOLUTIONS
135 Engineers Rd Suite 150
Hauppauge, NY 11788

Certificate of Calibration

A 3006

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Item 1653



NVLAP Lab Code 201016-0

Customer: Lesman Instruments
135 Bernice Dr
Bensenville IL 60106-3366

Product: HC2A-S
S/N: 20137002
Manufacturer: Rotronic AG
Specifications: See report below
Lab. Conditions: 23 ± 2 °C / 40 ± 25 %RH

Account: 000377 **Order:** 86532

The above mentioned instrument was calibrated in compliance with ISO/IEC 17025:2005 and ANSI/NCSL Z540-1 using Rotronic Instrument Corp laboratory procedures. All measurements are traceable to the International System of Units (SI) through NIST or other national metrology institutes. The measurement uncertainty values (U k=2) reported were estimated for a coverage factor of k=2, which approximates a 95% confidence level. The Test Uncertainty Ratio (TUR) is reported for each calibration point on this certificate. The Limit value represents the specified instrument performance. When calculating the Limit value for As Found data the specified drift value for 1 year is used. The measurement uncertainty has been taken into account when stating compliance to the Limit value. A guardband calculation is performed to limit the False Accept Risk to less than 2%. Calibration results relate only to the instrument calibrated. Humidity values have been measured within the temperature range of 24.5 ± 1°C. T

Parameter	Unit	Generator	Run Type	Ref.	UUT	Error	U (k=2)	Limit	Result	TUR
Temperature	°C	T00	AsLeft	24.30	24.29	-0.01	± 0.07	±0.15	P	2.1:1
Humidity	%RH	T00	AsLeft	0.35	0.31	-0.04	± 0.29	±0.98	P	3.4:1
Humidity	%RH	T10	AsLeft	11.07	11.00	-0.07	± 0.30	±0.99	P	3.3:1
Humidity	%RH	T35	AsLeft	35.08	35.12	0.04	± 0.35	±1.00	P	2.9:1
Humidity	%RH	T80	AsLeft	79.98	80.01	0.03	± 0.59	±1.11	P	1.9:1

NOTE: In the Result column P indicates Pass, F indicates Fail, I indicates Indeterminate. Indeterminate results are error values which are less than the specified limit but exceed the guardband limit.
999.00 in UUT column indicates UUT failure. Disregard all measured values for that calibration point.

Calibration References: see Generator column in the above report for each individual calibration point

T00 to T80: Dew or frost point measured with RH Systems Dew Point Mirror mod. 973 S/N 11-0804 (due Dec. 28, 2017)

T00 to T80: Temperature measured with Fluke Digital Thermometer mod. 1504 S/N B25837 (due Aug. 8, 2017) and Fluke Bead Probe mod. 5611A S/N 111031098 (due Aug. 8, 2017).

By: Mary Boney
Calibration Technician

Date 6/23/2017

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