

Calibration Report: Pressure Transducer S/N: P1730016

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Summary

Calibration Date: 28 Mar 2007

Next Calibration Date: 28 Mar 2008

A collection, analysis and calibration of data from Vaisala Pressure Transducer, S/N: P1730016 has been completed. The calibration was performed by the calibration facility, Vaisala, Inc. This data was collected by Vaisala, Inc. on March 28, 2007.

MODEL: PTB101B

SERIAL NUMBER: P1730016

The test data presented in data table format show the transducers deviation and correction in hPa. The calibration uncertainty is given at 95% confidence level.

Note: Units in hPa per user's request.

APPLICATION: Add corrections to measurements per post calibration table.

CALIBRATION CERTIFICATE

before adjustment

Customer SCIENCE SYSTEMS & APPLICATION
Instrument PTB101B Analog barometer
Serial number P1730016
Manufacturer Vaisala Oyj, Finland
Calibration date 28th March 2007
Test procedure doc210609a

This instrument has been calibrated against a Vaisala PTB220 factory working standard which has been calibrated against a Ruska 2465 pressure balance traceable to the National Institute of Standards and Technology (NIST, USA) at Vaisala Measurement Standards Laboratory (MSL). Vaisala MSL has been accredited by the Finnish Accreditation System (FINAS) according to ISO/IEC 17025 standard.

Calibration results

| Reference pressure hPa | Observed pressure hPa | Correction* hPa | Uncertainty** hPa |
|---------------------------|--------------------------|--------------------|----------------------|
| 619.9 | 620.3 | -0.4 | ± 0.15 |
| 699.9 | 700.1 | -0.2 | ± 0.15 |
| 799.9 | 799.9 | 0.0 | ± 0.15 |
| 850.0 | 849.8 | 0.2 | ± 0.15 |
| 900.0 | 899.7 | 0.3 | ± 0.15 |
| 950.0 | 949.6 | 0.4 | ± 0.15 |
| 1000.0 | 999.5 | 0.5 | ± 0.15 |
| 1060.1 | 1059.7 | 0.4 | ± 0.15 |

*To obtain the true pressure, add the correction to the barometer reading. Interpolated corrections may be used at intermediate readings of the scale of the barometer.

**The calibration uncertainty given at 95 % confidence level, k = 2

Equipment used in calibration

| Type | Serial number | Calibration date | Certificate number |
|----------------|---------------|------------------|--------------------|
| Vaisala PTB220 | X3710015 | 2006-12-05 | K008-P01657 |
| Vaisala PTB220 | X1260001 | 2006-12-07 | K008-P01656 |
| AT 34970A | US37047279 | 2006-08-24 | 1000330376 |

Ambient conditions / Humidity 29 ± 5 %RH, Temperature 24 ± 1 °C, Pressure 1018 ± 1 hPa

For Vaisala

Francois Johnson

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CALIBRATION CERTIFICATE

after adjustment

Customer SCIENCE SYSTEMS & APPLICATION
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Serial number P1730016
Manufacturer Vaisala Oyj, Finland
Calibration date 28th March 2007
Test procedure doc210609a

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At the time of shipment, the instrument described above met its operating specifications.

Calibration results

| Reference pressure hPa | Observed pressure hPa | Correction* hPa | Uncertainty** hPa |
|---------------------------|--------------------------|--------------------|----------------------|
| 620.2 | 620.2 | 0.0 | ± 0.15 |
| 700.3 | 700.3 | 0.0 | ± 0.15 |
| 800.4 | 800.2 | 0.2 | ± 0.15 |
| 850.5 | 850.3 | 0.2 | ± 0.15 |
| 900.3 | 900.0 | 0.3 | ± 0.15 |
| 950.3 | 950.0 | 0.3 | ± 0.15 |
| 1000.4 | 1000.1 | 0.3 | ± 0.15 |
| 1060.4 | 1060.3 | 0.1 | ± 0.15 |

*To obtain the true pressure, add the correction to the barometer reading. Interpolated corrections may be used at intermediate readings of the scale of the barometer.

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Equipment used in calibration

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