



## Catatan Hasil Kalibrasi Internal

### *Internal Calibration Record*

## *Thermohygrometer*

No. : F-PM-01-39

Rev. : 00

Date : 3 September 2014

<b>Merek</b> <i>Brand</i>	:	<b>Bidang</b> <i>Department</i>	:
<b>Model/Tipe</b> <i>Model/Type</i>	:	<b>Lokasi</b> <i>Location</i>	:
<b>Kode kalibrasi</b> <i>Calibration code</i>	:	<b>Suhu ruang</b> <i>Ambient temp.</i>	:
<b>Kapasitas</b> <i>Capacity</i>	:	<b>Kelembaban</b> <i>Humidity</i>	:
<b>Resolusi Suhu</b> <i>Resolution of Temperature</i>	: °C	<b>Petugas</b> <i>Operator</i>	:
<b>Resolusi RH</b> <i>Resolution of RH</i>	: %RH	<b>Tanggal kalibrasi</b> <i>Calibration date</i>	:

Kalibrator yang digunakan Reference used	Kode Code	Tanggal kalibrasi Kalibrator Cal. date of Calibrator

## 1. Pengukuran Suhu

## *Temperature measurement*

## A. Data

A. Data				
No.	$T_{Std}$ $T_{Reff}$ (°C)	$T_{Std + koreksi}$ $T_{Reff + Corr}$ (°C)	$T_{Alat}$ $T_{Reading}$ (°C)	Koreksi Correction (°C)
1				
2				
3				
4				
5				
<b>Rata-rata / Average</b>				
<b><math>\sigma_{n-1}</math></b>				

Persamaan koreksi suhu standar :  $y = 0,0006x^4 + 0,9705x + 0,0144$

#### B. Ketidakpastian Pengukuran Suhu

### *Uncertainty of Temperature measurement*

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**2. Pengukuran RH***Humidity measurement***A. Data**

No.	RH Standar $RH_{Ref}$ (%RH)	RH Std+Koreksi $RH_{Ref+Corr}$ (%RH)	RH Alat $RH_{Reading}$ (%RH)	Koreksi Correction (%RH)
1				
2				
3				
4				
5				
<b>Rata-rata / Average</b>				
$\sigma_{n-1}$				

Persamaan koreksi RH standar :  $y = -0,0012x^2 + 1,1222x - 5,1468$ 

Equation of reference RH correction

**B. Ketidakpastian Pengukuran RH***Uncertainty of Humidity measurement*

No. No.	Sumber Ketidakpastian Source of Uncertainty	Satuan Unit	Distribusi Distribution	Nilai $U_t$ $U_t$ value	Pembagi Divisor	$u_i$ $u_i$	Koef., Ci Coeff., $C_i$	$u_i \cdot Ci$ $u_i \cdot C_i$	V V
1	Reproducibility, $U_{Rep} = \sigma_{n-1}$	%RH	Normal		$\sqrt{5}$	0.0000	1	0.00000	4
2	Humidity reference, $U_{Ref} = U_{sert.}$	%RH	Normal		2	0.0000	1	0.00000	$\infty$
3	Resolution of RH $U_{Res} = \frac{1}{2} \text{Resolusi}$	%RH	Persegi/ square		$\sqrt{3}$	0.0000	1	0.00000	$\infty$
4	Humidity homogeneity $U_{Unif} = \sigma_{n-1}$	%RH	Normal		$\sqrt{5}$	0.0000	1	0.00000	4
5	Drift, $U_{Drift} = 10\% \times U_{95\%}$	%RH	Persegi/ square		$\sqrt{3}$	0.0000	1	0.00000	$\infty$
Ketidakpastian baku gabungan / Sum of Uncertainty , $u(D) = \text{SQRT}(\sum(u_i \cdot C_i)^2)$								0.000	
Derajat kebebasan efektif / Effective degree of freedom , $V_{eff}$								0.0E+00	
Faktor cakupan pada tingkat kepercayaan 95 % / Coverage Factor on uncertainty 95% , $K_{95\%}$								2	
Ketidakpastian gabungan perluasan / Advanced Uncertainty , $U(D) = u(D) \times K_{95\%}$ , dalam / in %RH								0.00	

**3. Hasil Kalibrasi***Calibration Results*

Thermometer					Hygrometer				
No.	$T_{Standar}$ $T_{Reference}$ (°C)	$T_{Alat}$ $T_{Reading}$ (°C)	Koreksi Correction (°C)	Ketidakpastian, $U_{95\%}$ Uncertainty, $U_{95\%}$ (°C)	No.	RH Standar $RH_{Reference}$ (%RH)	RH Alat $RH_{Reading}$ (%RH)	Koreksi Correction (%RH)	Ketidakpastian, $U_{95\%}$ Uncertainty, $U_{95\%}$ (%RH)

Dihitung Oleh Calculated by	Tanggal Date	Diperiksa oleh Checked by	Tanggal Date	Catatan Note