

### Calibration Certificate

Certificate No.: YEA(C)/ 230726/C875/007

Dated : 31.07.2023

ULR No. : CC22212300009972F

Calibrated for : **Central Pollution Control Board**  
Southend Conclave 1582, Rajdanga Main Road,  
Kolkata - 700107, West Bengal, India.

Calibrated on.	Next Calibration Due On.	Page No.	No. of Pages
28.07.2023	28.07.2024	1	2

#### Description of Instrument

*Name* : J-Type Thermocouple  
*Identification* : VPK-20A  
*Working Range* : 50 to 600 °C  
*Make* : N / F

Service Request No. / Order Reference : 230726/C875/001-016

Receipt of Instrument : 26.07.2023

Location where calibration performed : At permanent laboratory

Applicable Specification of Instrument to be Calibrated : Not Specified

Condition of Instrument to be Calibrated : Satisfactory

Basis of Calibration : Comparison method with reference to YEA/WI/T-08

Environmental Condition during Calibration : *Temp.* : 25±4°C *RH* : 30 to 75%

Equipment used for Calibration : Standard Data Acquisition Unit, Standard RTD Sensor & Standard R Type Thermocouple

Traceability : To National Standard vide Certificate No:  
YEA(C)/ 221221/Y001/001 valid till 20.12.2023  
TL/023/52.1.1 valid till 11.01.2024  
TL/023/175.1.1 valid till 08.02.2024

Measurement Uncertainty : The figures are stated in the result at coverage factor  
 $k= 2$  corresponding to confidence probability of  
95% for normal distribution.

Laboratory Identification : Sticker is affixed for authentication of calibration.

The above Instrument/Equipment/Machine has been calibrated .  
The results are given in the page 2 to ..... 2 ...of the certificate.

Cont...2



CC-2221

Certificate No.: YEA(C)/ 230726/C875/007

ULR No. : CC222123000009972F

Calibrated By : K. Rout

Date: 31.07.2023

Page 2 of 2 Pages

### Calibration Results

#### Thermal Calibration

#### Calibration Results of Thermocouple :

Sl. No.	Average DUC Value		Average Standard Value	Measurement Uncertainty
	(mV)	( °C )	( °C )	( ± °C )
1	5.3373	101.257	100.836	0.53
2	13.1810	243.258	242.502	
3	21.1380	387.12	386.03	1.60
4	25.9176	473.56	472.14	
5	32.7687	594.29	592.86	

Temperature Scale : ITS - 90

DUC : Device Under Calibration

**REMARKS :** The above J-Type Thermocouple has been calibrated and the readings are tabulated above.

**NOTES :** This certificate refers to the results tabulated at the time of calibration only for the above mentioned item submitted for calibration and this should not be reproduced, other than in full except with prior written approval from the head of calibration laboratory.

Authorised By



A. Das

Manager Calibration

\*\*\* End of the Calibration Certificate \*\*\*

