National Accreditation Board for Testing and Calibration Laboratories

(A Constituent Board of Quality Council of India)

CERTIFICATE OF ACCREDITATION

TEKTRONIX (INDIA) PVT. LTD.

has been assessed and accredited in accordance with the standard

ISO/IEC 17025:2005

"General Requirements for the Competence of Testing & Calibration Laboratories"

for its facilities at

Salarpuria Premia, Survey No. 16, Kadubeesana Halli, Varthur Hobli, Sarjapur Outer Ring Road, Bangalore , Karnataka

in the field of

CALIBRATION

Certificate Number	CC-2130		
Issue Date	22/05/2018	**Valid Until**	21/05/2020

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.

(To see the scope of accreditation of this laboratory, you may also visit NABL website www.nabl-india.org)

Signed for and on behalf of NABL

8907697020002000048 2

Anil Relia
Chief Executive Officer

National Accreditation Board for Testing and Calibration Laboratories
(A Constituent Board of Quality Council of India)

SCOPE OF ACCREDITATION

Laboratory Tektronix (India) Pvt. Ltd., Salarpuria Premia, Survey No. 16, Kadubeesana Halli, Varthur Hobli, Sarjapur Outer Ring Road, Bangalore , Karnataka

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number CC-2130 **Page** 1 of 13

Validity 22.05.2018 to 21.05.2020 **Last Amended on** 22.06.2018

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (±)	Remarks
		ELECTRO TECHNICAL CALIBRATION		
I.	**SOURCE**			
1.	DC Voltage$	1mV to 100mV 100mV to 1V 1V to 100V 100V to 1000V	0.0474 % to 0.0014.3 % 0.0014.3 % to 0.0005 % 0.0005 % to 0.0007 % 0.0007 % to 0.00083 %	Using Calibrator Fluke 5730A, 5720A by Direct Method
	DC Voltage*	10mV to 100mV 100mV to 1V 1V to 100V 100V to 1000V	0.0485 % to 0.0014 % 0.0014 % to 0.0007 % 0.0007 % to 0.0008 % 0.0008 % to 0.00085 %	Using Calibrator Fluke 5720A by Direct Method
2.	AC Voltage#	**10 Hz to 40 Hz** 1mV to 2mV 2mV to 20mV 20mV to 20V 20V to 200V	 0.78 % to 0.26 % 0.26 % to 0.05 % 0.05 % to 0.03 % 0.03 % to 0.025 %	Using Calibrator Fluke 5730A, 5720A, 5522A by Direct Method
		40 Hz to 1kHz 1mV to 2mV 2mV to 20mV 20mV to 200mV 200mV to 2V 2V to 20V 20V to 1000V	 0.6 % to 0.25 % 0.25 % to 0.03 % 0.03 % to 0.015 % 0.015 % to 0.006 % 0.006 % to 0.0065 % 0.0065 % to 0.0090%	
		1 kHz to 100 kHz 2mV to 2V 2V to 100V	 0.45 % to 0.015 % 0.015 % to 0.02 %	

Rjeshwar Kumar
Convener

Avijit Das
Program Manager

SCOPE OF ACCREDITATION

Laboratory Tektronix (India) Pvt. Ltd., Salarpuria Premia, Survey No. 16, Kadubeesana Halli, Varthur Hobli, Sarjapur Outer Ring Road, Bangalore , Karnataka

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number CC-2130 **Page** 2 of 13

Validity 22.05.2018 to 21.05.2020 **Last Amended on** 22.06.2018

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (±)	Remarks
		100 kHz to 1 MHz		
		2mV to 20mV	1.75 % to 0.46 %	
		20mV to 200mV	0.46 % to 0.27 %	
		200mV to 20 V	0.36 % to 0.23 %	
3.	DC Current#	10µA to 100µA	0.074 % to 0.0117 %	Using Calibrator Fluke 5720A by Direct Method
		100µA to 1mA	0.0117 % to .0050 %	
		1mA to 100mA	0.0052 % to .0065 %	
		100mA to 1A	0.0065 % to 0.0110 %	
		1A to 3A	0.0110 % to 0.0603 %	
		3A to 10A	0.0603 % to 0.0472 %	
		10A to 20A	0.0472 % to 0.14 %	Using Calibrator Fluke 5522A with 5500A Current Coil by Direct Method
		>20A to 1000A	0.14 % to 0.58 %	
4.	AC Current$	**10Hz to 40Hz**		Using Calibrator Fluke 5720A by Direct Method
		200µA to 100mA	0.109 % to 0.026 %	
	AC Current*	**10Hz to 40Hz**		Using Calibrator Fluke 5720A by Direct Method
		100µA to 100mA	0.11 % to 0.045 %	
	AC Current#	**40Hz to 1kHz**		Using Calibrator Fluke 5730A by Direct Method
		100µA to 1mA	0.109 % to 0.024 %	
		1mA to 100mA	0.024 % to 0.019 %	
		100mA to 1A	0.03 % to 0.04 %	Calibrator Fluke 5730A
		1A to 10A	0.05 % to 0.059 %	
		10A to 20A	0.59 to 0.20 %	
		1kHz to 5kHz		
		20mA to 10A	0.026 % to 0.11 %	
		5kHz to 10kHz		
		20mA to 10A	0.03 % to 0.42 %	

Rjeshwar Kumar
Convener

Avijit Das
Program Manager

SCOPE OF ACCREDITATION

Laboratory Tektronix (India) Pvt. Ltd., Salarpuria Premia, Survey No. 16, Kadubeesana Halli, Varthur Hobli, Sarjapur Outer Ring Road, Bangalore , Karnataka

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number CC-2130 **Page** 3 of 13

Validity 22.05.2018 to 21.05.2020 **Last Amended on** 22.06.2018

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (±)	Remarks
		50Hz >20A to 1000A	0.35 % to 0.77 %	Using Calibrator Fluke 5522A with 5500A Current Coil by Direct Method
5.	Resistance$	1Ω to 10MΩ 10MΩ to 100MΩ 100MΩ to 1GΩ	0.011 % to 0.0009 % 0.0009 % to 0.0128 % 0.0128 % to .0322 %	Using Calibrator Fluke5730A,5522A by Direct Method
		1Ω 10Ω 100Ω 1KΩ 10KΩ 100KΩ 1MΩ 10MΩ 1GΩ	0.00068 % 0.0005 % 0.0009 % 0.0009 % 0.0008 % 0.0009 % 0.0012 % 0.0013 % 0.031 %	Fixed Resistors, 742A/ 8508A-7000K
	Resistance*	1Ω to 10MΩ	0.01 % to .004 %	Using Calibrator Fluke 5720A
		10MΩ to 100MΩ 100MΩ to 1GΩ	0.004 % to 0.014 % 0.014 % to 0.85 %	Calibrator Fluke 5522A /8508A by Direct Method
6.	Capacitance#	**1kHz** 220PF to 10nF 10nF to 1µF 1µF to 100Mf	5.8 % to 0.41 % 0.41 % 0.41 % to 0.28 %	Using Calibrator Fluke 5522A
	Capacitance$	100mF to 1F	0.28 % to 0.66 %	Using Capacitor Standard GR 1417 by Direct Method

Rjeshwar Kumar
Convener

Avijit Das
Program Manager

SCOPE OF ACCREDITATION

Laboratory **Tektronix (India) Pvt. Ltd., Salarpuria Premia, Survey No. 16, Kadubeesana Halli, Varthur Hobli, Sarjapur Outer Ring Road, Bangalore , Karnataka**

Accreditation Standard **ISO/IEC 17025: 2005**

Certificate Number **CC-2130** **Page** **4 of 13**

Validity **22.05.2018 to 21.05.2020** **Last Amended on** **22.06.2018**

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (±)	Remarks
7.	Inductance#	**1kHz** 100µH to 10H	0.3 % to 0.12 %	Using Standard Inductance Genrad 1482 Series by Direct Method
8.	DC Power#	1V to 600V 1mA to 1000A 1mW to 10W 10W to 1kW 1kW to 12kW	 0.038% to 0.43% 0.03 % to 0.45 % 0.45% to 0.41%	Using Calibrator Fluke 5522A with 5500 Coil
9.	AC Power#	**50 Hzto1 kHz @ UPF** 120 V to 240 V 0.01 A to 20 A 1.2 W to 4.8 kW	0.095 % to 0.12 %	Using Calibrator Fluke 5522A with 5500 Coil
		50Hzto1kHz @ 0.8PF 120V to 240V 0.1A to 20A 9.6W to 3.8kW	0.099 % to 0.24 %	
		50Hzto1kHz @ 0.5PF 120V to 240V 0.1A to 20A 6W to 2.4kW	0.38 % to 0.39 %	
		50Hzto1kHz @ 0.2PF 120V to 240V 0.1A to 20A 2.4W to 960W	0.56 % to 0.58 %	

Rjeshwar Kumar
Convener

Avijit Das
Program Manager

SCOPE OF ACCREDITATION

Laboratory Tektronix (India) Pvt. Ltd., Salarpuria Premia, Survey No. 16, Kadubeesana Halli, Varthur Hobli, Sarjapur Outer Ring Road, Bangalore , Karnataka

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number CC-2130 **Page** 5 of 13

Validity 22.05.2018 to 21.05.2020 **Last Amended on** 22.06.2018

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (±)	Remarks
10.	Temperature Simulation#			
	K-Type Thermocouple	(-) 200°C to 1372°C	0.47 °C	Using Calibrator Fluke 5522A by Direct Method
	J-Type Thermocouple	(-) 200°C to 1200°C	0.32 °C	
	T-Type Thermocouple	(-) 250°C to 400°C	0.74 °C	
	R-Type Thermocouple	(-) 0°C to 1750°C	0.67 °C	
	S-Type Thermocouple	(-) 0°C to 1750°C	0.56 °C	
	N-Type Thermocouple	(-) 200°C to 1300°C	0.47 °C	
	RTD-Type	(-) 200°C to 800°C	0.37 °C	
11.	Oscilloscope#			Using Oscilloscope Calibrator Fluke 9500B/9530 Heads, Bandwidth Signal Generator E8257D, MA2438A ML2444D
	Amplitude (Dc Signal)	1mV to 100mV	0.21 % to 0.06 %	
		100mV to 190V	0.06 % to 0.03 %	
	Bandwidth	**50kHz &10MHz** Ref		
		50kHz to 8GHz	0.22 dB to 0.26 dB	
		8GHz to 18GHz	0.26 dB to 0.35 dB	
		18GHz to 26 GHz	0.35 dB to 0.45 dB	
	Time Marker	1ns to 5s	0.0001 % to 0.00003 %	Time Marker
12.	Frequency$	1Hz to 10MHz	0.0000058 % to 0.00000058 %	Using Function Generator AFG 3252, Signal Generator E8257D By Direct Method
		10MHz to 20GHz	0.00000058 % to 0.00000029%	
		20 GHz to 40 GHz	0.00000029% to 0.00000046%	
	Frequency*	1Hz to 10MHz	0.00012 % to 0.00006 %	Using Function Generator AFG3252, Signal Generator MG3694C By Direct Method
		10MHz to 20GHz	0.00006 % to 0.00035 %	
		20GHz to 40 GHz	0.00035 % to 0.00046 %	

Rjeshwar Kumar
Convener

Avijit Das
Program Manager

SCOPE OF ACCREDITATION

Laboratory Tektronix (India) Pvt. Ltd., Salarpuria Premia, Survey No. 16, Kadubeesana Halli, Varthur Hobli, Sarjapur Outer Ring Road, Bangalore , Karnataka

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number CC-2130 **Page** 6 of 13

Validity 22.05.2018 to 21.05.2020 **Last Amended on** 22.06.2018

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (±)	Remarks
13.	Rf Power$	10MHz to 18GHz Impedance 50Ω -50dBm to 12dBm 18GHz to 40 GHz Impedance 50 Ω -50 dBm to 12 dBm	5.5 % to 6.0 % 6.0 % to 8.7 %	Using Signal Generator E8257D Power meter with Sensor ML2438A, MA2444D by Direct Method
14.	Rf Attenuation#	**10MHz to 18GHz** 1dB to 50dB	0.25 dB to 0.45 dB	Using Signal Generator E8257D, Power Meter MA 2438A with Sensor ML 2444d, Step Attenuator 8494B, 8496B.
15.	VSWR$	**10MHz to 18GHz** Fixed Values 1.05(0.023),1.10, 1.20, 1.50, 2.0(0.33)	0.095 LU to 0.40 LU	Using Maury Microwave 2611A Series by Direct Method
II.	**MEASURE**			
1.	Dc Voltage$	1mV to 10mV 10mV to 1V 1V to 1000V	0.0082% to 0.0052% 0.0052% to 0.0005% 0.0005% to 0.00053 %	Using DMM Fluke 8508A by Direct Method
	Dc Voltage*	10mV to 10V 1V to 1000V	0.04 % to 0.0019 % 0.001 % to 0.0035 %	Using DMM Fluke 8508A by Direct Method
2.	AC Voltage$	**10 Hz to 40 Hz** 1 mV to 10 mV 10 mV to 1 V 1 V to 100 V	0.16 % to 0.038 % 0.038 % to 0.01 % 0.01 % to 0.01 %	Using AC Measurement Standard Fluke 5790A by Direct Method

Rjeshwar Kumar
Convener

Avijit Das
Program Manager

SCOPE OF ACCREDITATION

Laboratory Tektronix (India) Pvt. Ltd., Salarpuria Premia, Survey No. 16, Kadubeesana Halli, Varthur Hobli, Sarjapur Outer Ring Road, Bangalore , Karnataka

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number CC-2130 **Page** 7 of 13

Validity 22.05.2018 to 21.05.2020 **Last Amended on** 22.06.2018

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (±)	Remarks
		40 Hz to 10 kHz 1 mV to 10 mV 10 mV to 1 V 1 V to 1000 V	 0.17 % to 0.023 % 0.023 % to 0.008 % 0.008 % to 0.015 %	
		10 kHz to 100 kHz 1 mV to 1 V 1 V to 10 V 10 V to 100 V	 0.42 % to 0.016 % 0.016 % to 0.009 % 0.009 % to 0.03 %	
		100 kHz to 1 MHz 1 mV to 10 mV 10 mV to 10 V	 0.44 % to 0.19 % 0.19 % to 0.14 %	
	Ac Voltage*	**1 kHz** 100 mV to 1 V 1 V to 10 V 10 V to 100 V 100 V to 700 V 700 V to 1000 V	 0.21 % to 0.44 % 0.04 % to 0.011 % 0.011 % to 0.03 % 0.03 % to 0.05 % 2.03 % to 0.084 %	Using DMM Agilent 3458A /Fluke 8508A by Direct Method
3.	DC Current#	100 µA to 1 mA 1 mA to 100 mA 100 mA to 1 A 1 A to 20 A >20 A to 100 A	0.045 % to 0.003 % 0.003 % to 0.005 % 0.005 % to 0.0027 % 0.0027 % to 0.005 % 0.32 % to 0.33 %	Using DMM Fluke 8508A/Fluke A40 Shunts by Direct Method Using Vaiseshika 9410

Rjeshwar Kumar
Convener

Avijit Das
Program Manager

SCOPE OF ACCREDITATION

Laboratory Tektronix (India) Pvt. Ltd., Salarpuria Premia, Survey No. 16, Kadubeesana Halli, Varthur Hobli, Sarjapur Outer Ring Road, Bangalore , Karnataka

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number CC-2130 **Page** 8 of 13

Validity 22.05.2018 to 21.05.2020 **Last Amended on** 22.06.2018

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (±)	Remarks
4.	AC Current$	**300Hz to 1kHz** 100µA to 1mA **10Hz to 5kHz** 1mA to 10mA 10mA to 1A 1A to 20A	0.105 % to 0.056 % 0.036 % 0.036 % to 0.026 % 0.026 % to 0.080 %	Using DMM Fluke 8508A/Fluke A40 Shunts by Direct Method
	Ac Current*	**1kHz** 100µA to 1mA 1mA to 100mA 100mA to 1A 11A to 20A	0.105 % to 0.06 % 0.06 % to 0.06 % 0.06 % to 0.15 % 0.15 % to 0.25 %	Using DMM Fluke 8508A by Direct Method
5.	Resistance#	1Ω to 10Ω 10Ω to 100Ω 100Ω to 100kΩ 100kΩ to 10MΩ 10MΩ to 100MΩ 100MΩ to 1GΩ	0.0044 % to 0.0017 % 0.0017 % to 0.0015 % 0.0015 % to 0.0033 % 0.0033 % to 0.0040 % 0.0040 % to 0.0198 % 0.0198 % to 0.17 %	Using DMM Fluke 8508A by Direct Method
6.	Capacitance#	**1kHz** 10pF to 100pF 100pF to 10nF 10nF to 100nF 100nF to 1000nF 1000nF to 100µF	0.22 % to 0.21 % 0.21 % to 0.03 % 0.035 % to 0.042 % 0.042 % to 0.033 % 0.033 % to 0.32 %	Using RLC Digi Bridge Quadtech 1693 by Direct Method
7.	Inductance#	100µH to 10mH 10mH to 1H 1H to 10H	0.22 % to 0.23 % 0.23 % to 0.041 % 0.041 % to 0.22 %	Using RLC Digi Bridge Quadtech 1693 by Direct Method

Rjeshwar Kumar
Convener

Avijit Das
Program Manager

SCOPE OF ACCREDITATION

Laboratory Tektronix (India) Pvt. Ltd., Salarpuria Premia, Survey No. 16, Kadubeesana Halli, Varthur Hobli, Sarjapur Outer Ring Road, Bangalore , Karnataka

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number CC-2130 **Page** 9 of 13

Validity 22.05.2018 to 21.05.2020 **Last Amended on** 22.06.2018

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (±)	Remarks
8.	Phase Angle[$]	±180Deg	0.03 Deg	Using phase meter clark Hess/6000 by Direct Method
9.	Period[$]	1ns to 5s	0.00008 %	Using Counter Tektronix MCA3040 by Direct Method
10.	Temperature Simulation[#] K-Type Thermocouple J-Type Thermocouple E-Type Thermocouple R-Type Thermocouple S-Type Thermocouple T-Type Thermocouple N-Type Thermocouple RTD-Type	 (-)200 °C to 1372 °C (-)200 °C to 1200 °C (-)250 °C to 1000 °C 0 °C to 1750 °C 0 °C to 1750 °C (-)250 °C to 400 °C (-)200 °C to 1300 °C (-)200 °C to 800 °C	 0.013 °C to 0.018 °C 0.012 °C to 0.014 °C 0.03 °C to 0.01 °C 0.23 °C to 0.1 °C 0.03 °C to 0.13 °C 0.015 °C 0.02 °C to 0.026 °C 0.001 °C to 0.014 °C	Using DMM Fluke 8508A/Zero Bath by Direct Method
11.	AC Power[$]	@ UPF, 50Hz 60V to 25 V, 0.1A to 20A 6W to 12W 12W to 4.8W @0.2pF, 50Hz 60V to 250V, 0.1A to 20A 1.2W to 2.4W 2.4W to 240W 240W to 960W @0.5 pF, 50 Hz 60V to 240V, 0.1A to 20A 6W to 60W 60W to 2.45W	 2.05 % to 1.25 % 1.25 % to 0.15 % 1.19 % to 0.64 % 0.64 % to 0.154 % 0.154 % to 0.176 % 0.95 % to 0.37 % 0.37 % to 0.16 % 2.6 % to 0.367 %	Using Power Analyzer PA 4000 by Direct Method

Rjeshwar Kumar
Convener

Avijit Das
Program Manager

SCOPE OF ACCREDITATION

Laboratory Tektronix (India) Pvt. Ltd., Salarpuria Premia, Survey No. 16, Kadubeesana Halli, Varthur Hobli, Sarjapur Outer Ring Road, Bangalore , Karnataka

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number CC-2130 **Page** 10 of 13

Validity 22.05.2018 to 21.05.2020 **Last Amended on** 22.06.2018

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (±)	Remarks
		@0.8 pF, 50Hz 60V to 240V, 0.1A to 20A 9.6W to 896W 96W to 960W 960W to 3.8kW	0.37 % to 0.15 % 0.15 % to 0.151 %	
12.	Frequency$	1Hz to 10MHz 10MHz to 20GHz 20GHz to 40GHz	0.0000058 % to 0.00000058 % 0.00000058 % to 0.00000029 % 0.00000029 % to 0.00000046 %	Using Rubidium Fluke 910R/ Counter Tek MCA 3040 counter/ Analyzer
	Frequency*	1Hz to 10MHz 10MHz to 20GHz 20GHz to 40 GHz	0.00015 % to 0.000065 % 0.000065 % to 0.000035 % 0.000035 % to 0.000049 %	Using Microwave Counter/Analyzer Tektronix MCA3040
13.	Rf Power$	**10MHz to 18GHz** Impedance 50 Ohm (-)50dBm to 12dBm **18MHz to 40GHz** Impedance 50 Ohm (-)50dBm to 12dBm	5.5 % to 6.0 % 6.0 % to 8.7 %	Using Signal Generator E8257D, Power Meter with Sensor ML 2438A and MA2444D by Direct method
	Rf Power*	**10MHz to 18GHz** Impedance 50 Ohm (-)50dBm to 12dBm **18MHz to 40GHz** Impedance 50 Ohm -50dBm to 12dBm	6.0 % to 7.0 % 7.0 % to 9.0 %	Using Signal Generator MG3694C, Power Meter with Sensor ML 2438A and MA2444D by Direct Method

Rjeshwar Kumar
Convener

Avijit Das
Program Manager

SCOPE OF ACCREDITATION

Laboratory **Tektronix (India) Pvt. Ltd., Salarpuria Premia, Survey No. 16, Kadubeesana Halli, Varthur Hobli, Sarjapur Outer Ring Road, Bangalore , Karnataka**

Accreditation Standard **ISO/IEC 17025: 2005**

Certificate Number **CC-2130** **Page** **11 of 13**

Validity **22.05.2018 to 21.05.2020** **Last Amended on** **22.06.2018**

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (±)	Remarks
14.	RF Attenuation[$]	10MHz to 18GHz 1dB to 50dB 10MHz to 40GHz 1dB to 50dB	0.25 dB to 0.45 dB	Using Signal Generator E8257D Power Meter with Sensor Step Attenuator 8494B,8496B by Direct Method
	RF Attenuation[*]	**10MHz to 18GHz** 1dB to 50dB	0.25 dB to 0.50 dB	Using Signal Generator MG3694C, Power Meter with Sensor Step Attenuator 8494B,8496B by Direct Method
15.	VSWR[$]	**10MHz to 18GHz** Fixed Values 1.05(0.023), 1.10, 1.20, 1.50, 2.0(0.40)	0.085 LU to 0.38 LU	Using VSWR Bridge Anristu 560-97N-1, Maury Microwave Load 2611 A series by Direct Method
16.	Modulation[#] AM/FM Frequency Modulation	CF (Rate @ 1kHz) 1GHz (10 % to 90 %) CF (1GHz) 10kHz to ≤200kHz	3.5 % to 3.6 % 6.0 % to 6.1 %	Using Measuring receiver HP 8902A by Direct Method

Rjeshwar Kumar
Convener

Avijit Das
Program Manager

National Accreditation Board for Testing and Calibration Laboratories
(A Constituent Board of Quality Council of India)

SCOPE OF ACCREDITATION

Laboratory Tektronix (India) Pvt. Ltd., Salarpuria Premia, Survey No. 16, Kadubeesana Halli, Varthur Hobli, Sarjapur Outer Ring Road, Bangalore , Karnataka

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number CC-2130 **Page** 12 of 13

Validity 22.05.2018 to 21.05.2020 **Last Amended on** 22.06.2018

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (±)	Remarks
		THERMAL CALIBRATION		
I.	**TEMPERATURE**			
1.	Temperature RTD, Thermocouple, (With Or Without Indicator) Temperature Gauge[$]	0˚C to 400˚C 400˚C to 700˚	0.29 ˚C 1.68 ˚C	Using SPRT & 8 ½ DMM by Comparison Method Using S-Type Thermocouple & 8 ½ DMM by Comparison Method
2	Oven, Bath ,Dry well , Furnace [$] (Single Point)	(-)40˚C to 400˚C 400˚C to 1000˚C	0.25 ˚C 1.74 ˚C	Using SPRT & 8 ½ DMM by Direct Method Using S-Type Thermocouple & 8 ½ DMM by Comparison Method
3.	Temperature Chamber, Oven, Bath[♣] (Multipoint)	(-)70 ˚C to 180˚C	1.52 ˚C	Using RTD With LOGGER 2638A by Direct Method

Rjeshwar Kumar
Convener

Avijit Das
Program Manager

National Accreditation Board for Testing and Calibration Laboratories

(A Constituent Board of Quality Council of India)

SCOPE OF ACCREDITATION

Laboratory	**Tektronix (India) Pvt. Ltd., Salarpuria Premia, Survey No. 16, Kadubeesana Halli, Varthur Hobli, Sarjapur Outer Ring Road, Bangalore , Karnataka**
Accreditation Standard	**ISO/IEC 17025: 2005**
Certificate Number	**CC-2130**
Validity	**22.05.2018 to 21.05.2020**

Last Amended on 22.06.2018

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (±)	Remarks
4.	Specific Heat-Humidity , Humidity Chamber$^{\clubsuit}$ (Centre of the Chamber)	20 % RH to 95%RH @25˚C	1.55 % RH	Using Hygropalm Rotronic, HP22-A by direct Method

*** Measurement Capability is expressed as an uncertainty (±) at a confidence probability of 95%**
$Only in Permanent Laboratory
♣Only for Site Calibration
 # The laboratory is also capable for site calibration however, the uncertainty at site depends on the prevailing actual environmental conditions and master equipment used.

Rjeshwar Kumar
Convener

Avijit Das
Program Manager