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Quantity Measured / Instrument		Range/ Frequency * Calibration Measurement Capability (±)		Remarks		
	SOURCE					
1.	DC VOLTAGE ^{\$}	100mV to 220 mV 220 mV to 220 V 220 V to 1000 V	40 ppm to 20 ppm 20 ppm to 15 ppm 15 ppm to 24 ppm	Using Multifunction Calibrator Fluke 5522A/ 5700A by Direct Method		
2.	AC VOLTAGE ^{\$}	50 Hz to 1 kHz 3 mV to 220 mV 220 mV to 220 V 220 V to 1000 V	0.6 % to 0.032 % 0.032 % to 135 ppm 135 ppm to 0.36 %	Using Multifunction Calibrator Fluke 5522A/ 5700A by Direct Method		
3.	DC CURRENT ^{\$}	100 μA to 220 μA 220 μA to 220 mA 220 mA to 2.0 A 2.0 A to 20 A >20 A to 1000A		Using Multifunction Calibrator Fluke 5522A/ 5700A by Direct Method Using Multifunction Calibrator Fluke 5522A by Direct Method (with Current Coils)		
4.	AC CURRENT ^{\$}	50 Hz to 1 kHz 100μA to 220μA 220 μA to 220mA 220 mA to 2.2 A 2.2 A to 20 A	0.31 % to 0.05 % 0.055 % 0.055 % to 0.09 % 0.09 %	Fluke 5522A/	nction Calibrator 5700A by Direct ethod	
		50 Hz 20 A to 1000 A	0.4 %	Fluke 5522A/	nction Calibrator 5700A by Direct 1 Current Coils	

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				Quantity Measured / Instrument	Range/ Frequency	* Calibration Measurement Capability (±)	
		5.	DC RESISTANCE ^{\$}	$2\Omega,$ $10\Omega,$ $100\Omega,$ $1k\Omega,$ $190k\Omega$ $1M\Omega,$ $1.9M\Omega,$ $19M\Omega,$ $100M\Omega$ (Discrete Values)	148ppm, 38ppm, 38ppm 18ppm, 19ppm 40ppm 164ppm, 164ppm 580ppm	Using Multifunction Calibrator Fluke 5522A by Direct Method	
6.	HIGH RESISTANCE [♯]	500 V to 5kV 1kΩ to 100MΩ 100MΩ to 100GΩ 1000 V to 5 kV 100GΩ to 600GΩ 600GΩ to 1TΩ	0.14% 0.14% to 1.4% 1.4% to 2.4% 2.4% to 3.5%	Using Decade Meg ohm Box H Tinsley Model 4720 by Direct Method			
7.	LOW RESISTANCE [#]	$250\mu\Omega$ to $1m\Omega$ $1m\Omega$ to 1000Ω	0.13% to 0.08% 0.08%	Using Standard Resistance 4737B/C by Direct Method			
8.	3 PHASE AC POWER ⁵ 50Hz Active	Voltage range: 50V to 300V Current range: 100mA to 30A		Fluke 6100B &	ver Calibrator 2 6101B by Direct ethod		
		Power Factor Range UPF to 0.5 0.5 to 0.1 0.1 to 0.01	:: 0.04% 0.04% to 0.1% 0.1% to 0.91%				

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9.	3 PHASE AC ENERG 50Hz (Active)	Y ^{\$} Voltage Range: 50V to 300V Current Range: 100mA to 30A		Fluke 6100B &	er Calibrator 6101B by Direct thod		
		Power Factor Range: UPF to 0.5 0.5 to 0.1 0.1 to 0.01	0.04% 0.04% to 0.1% 0.1% to 0.91%				
10.	FREQUENCY ^{\$}	10 Hz to 2 MHz	250ppm to 150ppm	Fluke 5522	ction Calibrator A, Reference Direct Method		
11.	HARMONICS ^{\$} a)Voltage Harmonics	1V to 230V Harmonic: 1 to 17 th	0.62%		librator 6100B & irect Method		
	b)Current Harmonics	18 th to 50 th Harmonic Current: 50mA to 24A Harmonics: 1 to 17 th 18 th to 50 th	0.05% 0.05% to 0.15%				
12.	TRANSFORMER TU RATIO ^{\$}	RNS 0.8 to 2220	0.06%		se TTR Biddle & by Direct Method		

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13.	TEMPERATAURE SI	IMULATION [#]				
	((Indicators/ Controlle	ers/ Recorder)				
	RTD	(-) 40 °C to 650 °C	0.27 °C	Using HP Resistance Box Multifunction Calibrator Flu 5522A by Direct		
	Thermocouple			Me	ethod	
	Ј Туре	(-) 40 $^{\circ}$ C to 1400 $^{\circ}$ C	0.21 °C to 0.5 °C			
	К Туре	(-) 40 $^{\circ}$ C to 1400 $^{\circ}$ C	0.21 °C to 0.5 °C			
	R Туре	(-) 40 $^{\circ}$ C to 1400 $^{\circ}$ C	0.21 °C to 0.5 °C			
	R Туре	(-) 40 °C to 1400 °C	0.21 °C to 0.5 °C			
	Ѕ Туре	(-) 40 °C to 1400 °C	0.21 °C to 0.5 °C			
	Т Туре	(-) 40 $^{\circ}$ C to 1400 $^{\circ}$ C	0.21 °C to 0.5 °C			
14.	TAN DELTA CAPACITANCE*	Tanδ: 0.005, 0.05, 0.15	2.3%	Using Capacitance &Tan Delta Standard by Direct Method		
		Capacitance 2000 pF	1.2%	J		
	MEASURE					
1.	DC VOLTAGE ^{\$}	100mV to 1 V 1 V to 1000 V	16ppm to 8ppm 8ppm to 14ppm	Using Reference Multimeter Fluke 8508A by Direct Method		
2.	DC HIGH VOLTAGE	2★ 1kV to 100 kV	0.81%	Using AC/DC kV Meter with Divider, Hipotronics KVM100/200 by Direct Measurement		
3.	AC VOLTAGE ^{\$}	50 Hz to 1 kHz 10mV to 100mV 100mV to 100 V 100V to 1000 V	0.16% to 150ppm 150ppm to 106ppm 106ppm to 125ppm	Using Reference Multimeter Fluke 8508A by Direct Method		

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4	AC HIGH VOLTAGE	50 Hz 1kV to 170 kV	2.6%	Using AC/DC kV Meter with Using Divider, Hipotronics KVM100/200 by Direct Method			
5.	DC CURRENT ^{\$}	100μA to 100mA 100mA to 1A 1A to 20A	265ppm to 135ppm 135ppm to 298ppm 298ppm to 620ppm	Using Reference Multimeter Fluke 8508A by Direct Method/V.I. Method			
6.	AC CURRENT ^{\$}	50Hz to 1 kHz 10μA to100μA 100 μA to 100 mA 100mA to 1A 1A to 20A	0.35% to 0.06% 0.06% 0.06% to 0.1% 0.1% to 0.11%	Using Reference Multimeter Fluke 8508A by Direct Method / V.I. Method			
7.	DC RESISTANCE ^{\$}	1Ω to 100 Ω 100 Ω to 100k Ω 100kΩ to 10MΩ 10 MΩ to 100MΩ 100MΩ to 1GΩ	57ppm to 15ppm 15ppm 15ppm to 50ppm 50ppm to 0.26% 0.26%	Using Reference Multimeter Fluke 8508A by Direct Method			
		$1G\Omega$ to $1T\Omega$	0.26% to 3.50%		n Resistance Direct Method		
8.	LOW RESISTANCE ^{\$}	$\begin{array}{ccc} 250 \ \text{u}\Omega & \text{to} \ 1 \text{m}\Omega \\ 1 \ \text{m}\Omega \ \text{to} \ 1\Omega \end{array}$	540 ppm to 360 ppm 360 ppm to 69 ppm	Using VI Method and Direct Measurement (MF Calibrator 5522A & Ref. Multimeter 8508A)			
9.	FREQUENCY ^{\$}	10 Hz to1 MHz	715ppm to 355ppm		y Counter Model / Direct Method		
10.	TIME INTERVAL ^{\$}	1 min to 60 min	0.09% to 0.02%	Using Digital Stop Watch by Comparison Method			

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11. TEMPERATURE SIN (INDICATORS/ CON RTD Mode Thermocouple J Type K Type R Type S Type T Type	MULATION ^{\$} NTROLLERS/ RECORDERS) (-) 40 °C to 650 °C (-) 40 °C to 1400 °C	0.03 °C to 0.27 °C 0.15 °C to 0.5 °C	Using HP Resistance Box by Direct Method Using Multifunction Calibrator Fluke 5522A (in measure mode) by Direct Method			

* Measurement Capability is expressed as an uncertainty (\pm) 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.