



Type: Initial accreditation



Certificate of Accreditation

This is to certify that

Powerpro Company Limited

142 Oba Akran Avenue, Ikeja, Lagos

Has been assessed by the Nigeria National Accreditation System and meets the requirements of the International Standard

ISO/IEC 17025:2017

with demonstrated technical competence in the field of

Calibration

for the specific services listed on the approved Scope of Accreditation.

On behalf of the Nigeria National Accreditation System:



Calibration
No. C0005

Issue date: April 07, 2022
Validity through: April 06, 2024

Scope of Accreditation
Calibration Laboratory
Powerpro Company Limited
142 Oba Akran Avenue, Ikeja, Lagos

Schedule NO.:C0005

Issue No. 1: 07 04, 2022

Valid to : 06 04, 2024

Measured Quantity	Range	Calibration and Measurement Capability (CMC)	Brief description of calibration method	Brief description of calibration equipment
DC Voltage	0 to 329.9999 mV	20ppm + 1 μ V	ANSI/NCSL Z540.1	Fluke 5522A Calibrator
	0 to 3.299999 V	11ppm + 2 μ V		
	0 to 32.99999 V	12ppm + 20 μ V		
	30 V to 329.9999 V	18ppm + 150 μ V		
	100 V to 1020.000 V	18ppm + 1500 μ V		
DC Current	0 to 329.999 μ A	150ppm + 0.02 μ A	ANSI/NCSL Z540.1	Fluke 5522A Calibrator
	0 to 3.29999 mA	100ppm + 0.05 μ A		
	0 to 32.9999 mA	100ppm + 0.25 μ A		
	0 to 329.999 mA	100ppm + 25 μ A		
	0 to 1.09999 A	200ppm + 40 μ A		
	1.1 A to 2.99999 A	380ppm + 40 μ A		
	0 to 10.9999 A	500ppm + 500 μ A		
	11 to 20.5 A	1000ppm + 750 μ A		
Resistance	0 to 10.9999 Ω	40ppm + 0.001 Ω	ANSI/NCSL Z540A.1	Fluke 5320A Calibrator
	11 to 32.9999 Ω	40ppm + 0.0015 Ω		
	33 to 109.9999 Ω	28ppm + 0.0014 Ω		
	110 Ω to 329.9999 Ω	28ppm + 0.002 Ω		
	330 Ω to 1.099999k Ω	28ppm + 0.002 Ω		
	1.1 to 3.299999 k Ω	28ppm + 0.02 Ω		
	3.3 to 10.99999 k Ω	28ppm + 0.02 Ω		
	11 to 32.99999k Ω	28ppm + 0.2 Ω		
	33 to 109.9999k Ω	28ppm + 0.2 Ω		
	110 to 329.99999 k Ω	32ppm + 2 Ω		
	330k Ω to 1.099999 M Ω	32ppm + 2 Ω		

	1.1 to 3.299999 MΩ	60ppm + 30Ω		
	3.3 to 10.999999 MΩ	130ppm + 50Ω		
	11 to 32.999999MΩ	250ppm + 2500Ω		
	33 to 109.99999MΩ	500ppm + 3000Ω		
	110 to 329.99999MΩ	3000ppm + 10000Ω		
	330 to1100MΩ	15000ppm + 50000Ω		
AC Voltage	1.0mV to 32.999mV 10 Hz to 45 Hz	800ppm + 6μV	ANSI/NCSL Z540.1	Fluke 5522A Calibrator
	1.0mV to 32.999mV 45Hz to 10KHz	150ppm + 6μV		
	1.0mV to 32.999mV 10KHz to 20KHz	200ppm + 6μV		
	1.0mV to 32.999mV 20 kHz to 50 kHz	1000ppm + 6μV		
	1.0mV to 32.999mV 50 kHz to 100 kHz	3500ppm + 12μV		
	1.0mV to 32.999mV 100kHz to 500kHz	8000ppm + 50μV		
	33 mV to 329.999 mV 10 Hz to 45 Hz	300ppm + 8μV		
	33 mV to 329.999 mV 45Hz to 10KHz	145ppm + 8μV		
	33 mV to 329.999 mV 10KHz to 20KHz	160ppm + 8μV		
	33 mV to 329.999 mV 20 kHz to 50 kHz	350ppm + 8μV		
	33 mV to 329.999 mV 50 kHz to 100 kHz	800ppm + 32μV		
	33 mV to 329.999 mV 100KHz to 500KHz	160ppm + 8μV		
	0.33V to 3.29999V 10 Hz to 45 Hz	350ppm + 8μV		
	0.33V to 3.29999V 45Hz to 10KHz	800ppm + 32μV		
	0.33V to 3.29999V 10KHz to 20KHz	2000ppm + 70μV		
0.33V to 3.29999V 20kHz to 50kHz	300ppm + 50μV			

	0.33 V to 3.29999 V 50kHz to 100kHz	150ppm + 60μV		
	0.33 V to 3.29999 V 100kHz to 500kHz	190ppm + 60μV		
	3.3V to 32.9999V 10 Hz to 45 Hz	300ppm + 50μV		
	3.3V to 32.9999V 45Hz to 10KHz	700ppm + 125μV		
	3.3V to 32.9999V 10KHz to 20KHz	2400ppm + 600μV		
	3.3V to 32.9999V 20kHz to 50kHz	300ppm + 650μV		
	3.3V to 32.9999V 50kHz to 100kHz	150ppm + 600μV		
	33 V to 329.999V 45Hz to 1KHz	240ppm + 600μV		
	33 V to 329.999V 1KHz to 10KHz	350ppm + 600μV		
	3.3V to 32.9999V 50kHz to 100kHz	900ppm + 1600μV		
	33 V to 329.999V 45Hz to 1KHz	190ppm + 2000μV		
	33 V to 329.999V 1KHz to 10KHz	200ppm + 6000μV		
	33 V to 329.999V 10kHz to 20kHz	250ppm + 6000μV		
	33 V to 329.999V 20kHz to 50kHz	300ppm + 6000μV		
	33 V to 329.999V 50kHz to 100kHz	2000ppm + 50000μV		
	330 V to 1020V 45Hz to 1KHz	300ppm + 10000μV		
	330 V to 1020V 1KHz to 5KHz	250ppm + 10000μV		
	330 V to 1020V 5kHz to 10kHz	300ppm + 10000μV		
AC Current	29.00 to 329.99μA 10 to 20 Hz	0.2% + 0.1μA	ANSI/NCSL Z540.1	Fluke 5522A Calibrator

29.00 to 329.99 μ A 20 to 45 Hz	0.15 + 0.1 μ A		
29.00 to 329.99 μ A 45 Hz to 1 KHz	0.125% + 0.1 μ A		
29.00 to 329.99 μ A 1 to 5 KHz	0.3% + 0.15 μ A		
29.00 to 329.99 μ A 5 to 10 KHz	0.8% + 0.2 μ A		
29.00 to 329.99 μ A 10 to 30 KHz	1.6% + 0.4 μ A		
0.33 to 3.29999 mA 10 to 20 Hz	0.2% + 0.15 μ A		
0.33 to 3.29999 mA 20 to 45 Hz	0.125% + 0.15 μ A		
0.33 to 3.29999 mA 45 Hz to 1 KHz	0.1% + 0.15 μ A		
0.33 to 3.29999 mA 1 to 5 KHz	0.2% + 0.2 μ A		
0.33 to 3.29999 mA 5 to 10 KHz	0.5% + 0.3 μ A		
0.33 to 3.29999 mA 10 to 30 KHz	1.0% + 0.6 μ A		
3.3 to 32.9999 mA 10 to 20 Hz	0.18% + 2 μ A		
3.3 to 32.9999 mA 20 to 45 Hz	0.09% + 2 μ A		
3.3 to 32.9999 mA 45 Hz to 1 KHz	0.04% + 2 μ A		
3.3 to 32.9999 mA 1 to 5 KHz	0.08% + 2 μ A		
3.3 to 32.9999 mA 5 to 10 KHz	0.2% + 3 μ A		
3.3 to 32.9999 mA 10 to 30 KHz	0.4% + 4 μ A		
33 to 329.999 mA 10 to 20 Hz	0.18% + 20 μ A		
33 to 329.999 mA 20 to 45 Hz	0.09% + 20 μ A		

	33 to 329.999mA 45Hz to 1KHz	0.04% + 20 μ A		
	33 to 329.999mA 1 to 5KHz	0.10% + 50 μ A		
	33 to 329.999mA 5 to 10KHz	0.2% + 100 μ A		
	33 to 329.999mA 10 to 30KHz	0.4% + 200 μ A		
	0.33 to 1.09999A 10 to 45 Hz	0.18% + 100 μ A		
	0.33 to 1.09999A 45 Hz to 1 kHz	0.05% + 100 μ A		
	0.33 to 1.09999A 1 to 5 kHz	0.6% + 1000 μ A		
	0.33 to 1.09999A 5 to 10 kHz	2.5% + 5000 μ A		
	1.1 to 2.99999 A 10 to 45 Hz	0.18%+ 100 μ A		
	1.1 to 2.99999 A 45 Hz to 5 kHz	0.06% + 100 μ A		
	1.1 to 2.99999 A 5 to 10 kHz	2.5% + 5000 μ A		
	3 to 10.9999 A 45 to 100 Hz	0.06% + 2000 μ A		
	3 to 10.9999 A 100 Hz to 1 kHz	0.10% + 2000 μ A		
	3 to 10.9999 A 1 to 5 kHz	3.0% + 2000 μ A		
	11 to 20.5 A 45 to 100 Hz	0.12% + 5000 μ A		
	11 to 20.5 A 100 Hz to 5 kHz	0.15% + 5000 μ A		
Capacitance	220 to 399.9pF	0.5% + 10pF	ANSI/NCSL Z540.1	Fluke 5522A Calibrator
	0.4 to 1.0999nF	0.5% + 0.01nF		
	1.1 to 3.2999nF	0.5% + 0.01nF		
	3.3 to 10.9999nF	0.25% + 0.01nF		
	11 to 32.9999nF	0.25% + 0.01nF		
	33 to 109.999nF	0.25% + 0.01nF		

	110 to 329.999nF	0.25%+ 0.03nF		
	0.33 to 1.09999 μ F	0.25% + 1nF		
	1.1 to 3.29999 μ F	0.25% + 3nF		
	3.3 to 10.9999 μ F	0.25% + 10nF		
	11 to 32.9999 μ F	0.40%+ 30nF		
	33 to 109.999 μ F	0.45% + 100nF		
	110 to 329.999 μ F	0.45% + 300nF		
	0.33 mF to1.09999mF	0.45% + 1 μ F		
	1.1 to 3.29999mF	0.45% + 3 μ F		
	3.3 to 10.9999 mF	0.45% + 10 μ F		
	11 to 32.9999mF	0.75% + 30 μ F		
	33 to 110mF	1.1% + 100 μ F		
Temperature	35-100 °C	± 0.5 °C	ANSI/NCSL Z540.1	Fluke 4181 Calibrator
	100-200 °C	± 0.7 °C		
	200-350 °C	± 1.2 °C		
	350-500 °C	± 1.6 °C		