



National Association of Testing Authorities, Australia

SCOPE OF ACCREDITATION

Power Parameters Pty Ltd

POWER PARAMETERS PTY LTD

| Accreditation Number: 2017 | Site Number: 2010 |

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Availability: Services available to external clients

Note: Not all of the columns of the scope of accreditation displayed include data.

The only data displayed is that deemed relevant and necessary for the clear description of the activities and services covered by the scope of accreditation.

Grey text appearing in a SoA is additional freetext providing further refinement or information on the data in the preceding line entry.

ISO/IEC 17025 (2005)
Calibration

SERVICE	PRODUCT	DETERMINANT	TECHNIQUE	PROCEDURE	LIMITATION/RANGE
DC and low frequency electrical metrology - Electrical instrument calibrators	Instrument calibrators	DC current	Comparison with a reference standard		

CAPABILITY

with a Calibration and Measurement Capability of -
1.3 nA at 0 A
0.02% reading + 0.02 μ A up to 2 A
0.02% reading from 2 to 20 A

		AC current	Comparison with a reference standard		
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CAPABILITY

with a Calibration and Measurement Capability of -
0.1% reading from 2.5 mA to 20 A at 50 Hz to 1 kHz

		DC voltage	Comparison with a		
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			reference standard		
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CAPABILITY
 with a Calibration and Measurement Capability of -
 0.7 μ V at 0 V
 10 μ V/V or 1.5 μ V whichever is the greater in the range 1 mV to 1.1 kV

		Resistance	Comparison with a reference standard		0 Ω to 100 M Ω
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CAPABILITY
 with a Calibration and Measurement Capability of -
 27 μ Ω at 0 Ω
 0.01% reading + 10 μ Ω from 1 m Ω to 1 M Ω
 0.1% reading from 1 M Ω to 100 M Ω

		AC voltage	Comparison with a reference standard		
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CAPABILITY
 with a Calibration and Measurement Capability of -
 0.05% reading + 20 μ V from 0.01 V to 0.25 V at 50 Hz to 20 kHz
 0.08% reading + 30 μ V from 0.01 V to 0.25 V at 20 kHz to 50 kHz
 0.1% reading + 30 μ V from 0.01 t V to 0.25 V at 50 kHz to 100 kHz
 0.02% reading from 0.25 V to 300 V at 50 Hz to 20 kHz
 0.02% reading above 300 V to 1 000 V at 50 Hz to 200 Hz
 0.04% reading above 300 V to 1 000 V at 200 Hz to 20 kHz
 0.04% reading above 0.25 V to 300 V at 20 kHz to 50 kHz
 0.08% reading above 300 V to 1 000 V at 20 kHz to 50 kHz
 0.2% reading above 0.25 V to 10 V at 10 Hz
 0.08% reading above 0.25 V to 1 000 V at 20 Hz to 50 Hz
 0.08% reading above 0.25 V to 50 V at 50 kHz to 100 kHz
 0.2% reading above 50 V to 300 V at 50 kHz to 100 kHz
 0.4% reading above 300 V to 1 000 V at 50 kHz to 100 kHz
 0.2% reading above 0.25 V to 50 V at 100 kHz to 1 MHz
 0.1% reading from 2.5 mA to 20 A at 50 Hz to 1 kHz

DC and low frequency electrical metrology - Electrical measurement and test equipment	Ammeters; Current clamps;	DC current	Comparison with a reference standard		
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CAPABILITY
 with a Calibration and Measurement Capability of -
 1.3 nA at 0 A



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0.02% reading + 0.02 μ A up to 2 A
0.02% reading from 2 to 20 A
1% reading from 20 A to 1 000 A for clamp-on ammeters
using multiple turns

		AC current	Comparison with a reference standard		
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CAPABILITY

with a Calibration and Measurement Capability of -
0.1% reading above from 2.5 mA to 20 A at 50 Hz to 1 kHz
1.0% reading from 20 A to 900 A at 50 Hz for clamp-on ammeters using multiple turns

	Ohm meters	Resistance	Comparison with a reference standard		
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CAPABILITY

with a Calibration and Measurement Capability of -
27 $\mu\Omega$ at 0 Ω
0.01% reading + 10 $\mu\Omega$ from 1 m Ω to 1 M Ω
0.1% reading from 1 M Ω to 100 M Ω

	Voltmeters	DC voltage	Comparison with a reference standard		
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CAPABILITY

with a Calibration and Measurement Capability of -
0.7 μ V at 0 V
10 μ V/V or 1.5 μ V whichever is the greater in the range 1 mV to 1.1 kV

		AC voltage	Comparison with a reference standard		
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CAPABILITY

with a Calibration and Measurement Capability of -
0.05% reading + 20 μ V from 0.01 V to 0.25 V at 50 Hz to 20 kHz
0.08% reading + 30 μ V from 0.01 V to 0.25 V at 20 kHz to 50 kHz
0.1% reading + 30 μ V from 0.01 V to 0.25 V at 50 kHz to 100 kHz
0.02% reading from 0.25 V to 300 V at 50 Hz to 20 kHz
0.02% reading above 300 V to 1 000 V at 50 Hz to 200 Hz
0.04% reading above 300 V to 1 000 V at 200 Hz to 20 kHz
0.04% reading above 0.25 V to 300 V at 20 kHz to 50 kHz
0.08% reading above 300 V to 1 000 V at 20 kHz to 50 kHz
0.2% reading above 0.25 V to 10 V at 10 Hz
0.08% reading above 0.25 V to 1 000 V at 20 Hz to 50 Hz
0.08% reading above 0.25 V to 50 V at 50 kHz to 100 kHz
0.2% reading above 50 V to 300 V at 50 kHz to 100 kHz



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0.4% reading above 300 V to 1 000 V at 50 kHz to 100 kHz
 0.2% reading above 0.25 V to 50 V at 100 kHz to 1 MHz
 0.1% reading from 2.5 mA to 20 A at 50 Hz to 1 kHz

DC and low frequency electrical metrology - Electrical standards	Voltage standards - Standard cells	Voltage	Comparison with a reference standard		
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CAPABILITY
 with a Calibration and Measurement Capability of -
 5 μ V at 1 V, 1.018 V and 10 V

	Voltage standards - E.M.F. reference devices	Voltage	Comparison with a reference standard		
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CAPABILITY
 with a Calibration and Measurement Capability of -
 5 μ V/V at 1 V to 10 V

	Conductance boxes; Precision resistors; Resistance boxes;	Resistance	Comparison with a reference standard		
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CAPABILITY
 with a Calibration and Measurement Capability of -
 0.01% reading + 10 $\mu\Omega$ from 1 m Ω to 1 M Ω
 0.1% reading from 1 M Ω to 100 M Ω

	AC/DC transfer instruments	Current; Voltage;	Comparison with a reference standard		
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CAPABILITY
 with a Calibration and Measurement Capability of -
 0.02% reading from 0.25 V to 300 V at 50 Hz to 20 kHz
 0.02% reading above 300 V to 1 000 V at 50 Hz to 200 Hz
 0.04% reading above 300 V to 1 000 V at 200 Hz to 20 kHz
 0.04% reading above 0.25 V to 300 V at 20 kHz to 50 kHz
 0.08% reading above 300 V to 1 000 V at 20 kHz to 50 kHz
 0.2% reading above 0.25 V to 10 V at 10 Hz
 0.08% reading above 0.25 V to 1 000 V at 20 Hz to 50 Hz
 0.08% reading above 0.25 V to 50 V at 50 kHz to 100 kHz
 0.2% reading above 50 V to 300 V at 50 kHz to 100 kHz
 0.4% reading above 300 V to 1 000 V at 50 kHz to 100 kHz
 0.2% reading above 0.25 V to 50 V at 100 kHz to 1 MHz



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0.1% reading from 2.5 mA to 20 A at 50 Hz to 1 kHz

Temperature metrology - Temperature measuring equipment	Base metal thermocouples	mV over °C range; Temperature;	Direct temperature and electrical measurement against reference standard		
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CAPABILITY

Including portable temperature measuring instruments by electrical simulation from -200°C to 1820°C with a Calibration and Measurement Capability of -

Type K Thermocouples

- 0.10°C from -200°C to 0°C
- 0.04°C from 0°C to 1000°C
- 0.05°C from 1000°C to 1372°C

Type T Thermocouples

- 0.07°C from -200°C to 0°C
- 0.04°C from 0°C to 400°C

Type B Thermocouples

- 0.12 °C from 800°C to 1820°C

Type E Thermocouples

- 0.07°C from -200°C to 0°C
- 0.04°C from 0°C to 1000°C

Type J Thermocouples

- 0.08°C from -200°C to 0°C
- 0.04°C from 0°C to 1200°C

Type N Thermocouples

- 0.07°C from -100°C to 0°C
- 0.06°C from 0°C to 800°C
- 0.04°C from 800°C to 1300°C

Type R Thermocouples

- 0.10°C from 400°C to 1768°C

Type S Thermocouples

- 0.11°C from 300°C to 1768°C

Cold Junction

- 0.13°C at 0°C
- 0.11°C at 21°C

RDT Indicators

- 0.008°C from -200°C to 800°C

Time and frequency metrology - Frequency, time and waveform measuring equipment	Frequency meters	Current; Voltage;	Measurement against reference standard		
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CAPABILITY

Amplitude Measurements with a Calibration and Measurement Capability of -

D.C. voltage

- 0.7 µV at 0 V
- 10 µV/V or 1.5 µV whichever is the greater in the range 1 mV to 1.1 kV

A.C. voltage

- 0.05% reading + 20 µV from 0.01 V to 0.25 V at 50 Hz to 20 kHz



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0.08% reading + 30 µV from 0.01 V to 0.25 V at 20 kHz to 50 kHz
 0.1% reading + 30 µV from 0.01 t V to 0.25 V at 50 kHz to 100 kHz
 0.02% reading from 0.25 V to 300 V at 50 Hz to 20 kHz
 0.02% reading above 300 V to 1 000 V at 50 Hz to 200 Hz
 0.04% reading above 300 V to 1 000 V at 200 Hz to 20 kHz
 0.04% reading above 0.25 V to 300 V at 20 kHz to 50 kHz
 0.08% reading above 300 V to 1 000 V at 20 kHz to 50 kHz
 0.2% reading above 0.25 V to 10 V at 10 Hz
 0.08% reading above 0.25 V to 1 000 V at 20 Hz to 50 Hz
 0.08% reading above 0.25 V to 50 V at 50 kHz to 100 kHz
 0.2% reading above 50 V to 300 V at 50 kHz to 100 kHz
 0.4% reading above 300 V to 1 000 V at 50 kHz to 100 kHz
 0.2% reading above 0.25 V to 50 V at 100 kHz to 1 MHz
 0.1% reading from 2.5 mA to 20 A at 50 Hz to 1 kHz

Frequency analysers	Time interval	Measurement against reference standard		
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CAPABILITY
with a Calibration and Measurement Capability of -
3 parts in 10⁹ for time base measurements

Counters	Time interval	Comparison with a reference standard		
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CAPABILITY
with a Calibration and Measurement Capability of -
3 parts in 10⁹ time base only

Tachometers	Rotational speed	Measurement against reference standard		
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CAPABILITY
with a Calibration and Measurement Capability of -
0.1% reading for
Hand held tachometers from 100 r/min to 15000 r/min
Optically coupled tachometers from 1000 r/min to 60,000 r/min

Stroboscopes	Time interval	Measurement against reference standard		
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CAPABILITY
with a Calibration and Measurement Capability of -
0.1% reading from 2 pulses per sec to 1000 pulses per sec

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