



Certificate of Calibration



0478

30A Shunt Type
Serial Number TN305

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FOR	Transmille Limited Unit 4 Select Business Centre Lodge Road Staplehurst Kent TN12 0QW
MANUFACTURER	Transmille Ltd
DATE OF CALIBRATION	1 September 2015
MEASUREMENT NUMBER	ED.11/15/005/EtA 535.303

The shunt was tested on direct and alternating current.

Measurements were obtained at an air temperature of $20 \pm 1^\circ\text{C}$.

The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor $k = 2$, providing a coverage probability of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS requirements. These values are given in Table 1. They relate only to the measured value and carry no implication regarding the stability of the resistor.

Table 2 gives the differences between the alternating and direct currents required to give the same output when successively applied to the input connector. The direct current was taken as the mean of values obtained with forward and reverse polarities. A negative sign indicates a lower value of alternating current was required to produce the same output.

Reference: 2015060189-2

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Date of Issue: 3 September 2015

Signed: *A J Wheaton* (Authorised Signatory)

Checked by: *AJW, TJS*

Name: A J Wheaton on behalf of NPLML



NATIONAL PHYSICAL LABORATORY

Continuation Sheet

Table 1 Uncertainty to at least 95% confidence level, ppm								
Applied Current (A)	Frequency / Hz							
	10	23	56	106	1 000	2 000	5 000	10 000
20	± 73	± 57	± 31	± 30	± 31	± 30	± 31	± 30

Table 2 AC/DC Difference, ppm								
Applied Current (A)	Frequency / Hz							
	10	23	56	106	1 000	2 000	5 000	10 000
20	- 50	- 24	- 2	- 26	- 20	- 15	- 16	- 25

END OF MEASUREMENTS