



Certificate of Calibration



0478

100mA Shunt Type
Serial Number 111247114

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FOR	Transmille Limited Unit 4 Select Business Centre Lodge Road Staplehurst Kent TN12 0QW
MANUFACTURER	Transmille Ltd
DATE OF CALIBRATION	2 September 2015
MEASUREMENT NUMBER	ED.11/15/003/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: 2015060189-1

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Date of Issue: 3 September 2015

Signed:

(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	20 000	30 000
0.1	± 18	± 17	± 16	± 16	± 16	± 16	± 16	± 16	± 16	± 16

Table 2 AC/DC Difference, ppm										
Applied Current (A)	Frequency / Hz									
	10	23	56	106	1 000	2 000	5 000	10 000	20 000	30 000
0.1	-10	-2	-1	-8	-4	-6	2	-1	9	-6

END OF MEASUREMENTS