

CERTIFICATE OF CALIBRATION

Issued By Transmille Ltd.

Certificate Number EXAMPLE

Date of Issue 09 December 2008



Approved Signatory



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**EXAMPLE
CERTIFICATE**

EXAMPLE EXAMPLE

Customer :

Date Received :

Instrument : System ID : EXAMPLE
Description : Multi Product Calibrator
Manufacturer : Transmille
Model Number : 3041
Serial Number : EXAMPLE
Procedure Version : 3.1/V000/N

Environmental Conditions

Temperature : 20°C +/- 1°C
Relative Humidity : 50% +/- 20%

Mains Voltage : 240V +/- 12V
Mains Frequency : 50Hz +/- 1Hz

Comments

Instrument was allowed to stabilise for at least 12 hours before calibration.
4 Wire kelvin connections were used for ohms measurements below 10kOhms
The instrument RS232 interface was used during calibration
PT100 resistance converted to temperature using BS1904 tables.
Tests marked # are not UKAS accredited but have been included for completeness.

Calibration Information

The instrument was calibrated against laboratory standards whose values are traceable to recognised National Standards. The uncertainty limits quoted refer to the measured values only, with no account being taken of the instruments ability to maintain its calibration.

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor $k=2$, providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS requirements.

Calibrated By : EXAMPLE

Date of Calibration : EXAMPLE

This certificate is issued in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service. It provides traceability of measurement to recognised national standards, and to the units of measurement realised at the National Physical Laboratory or other recognised national standards laboratories. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

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AFTER ADJUSTMENT RESULTS

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Test Title	Applied Value	Reading	Uncertainties
DC Voltage			
200mV Range	0.000 0mV	0.000 1mV	0.6uV
200mV Range	100.000 0mV	100.000 3mV	0.8uV
200mV Range	200.000 0mV	200.000 1mV	0.9uV
200mV Range	-100.0000mV	-99.9997mV	0.8uV
200mV Range	-200.0000mV	-200.0000mV	0.9uV
2V Range	0.220 000 0V	0.220 000 5V	0.9uV
2V Range	1.000 000 0V	1.000 000 6V	2.1uV
2V Range	2.000 000 0V	2.000 000 0V	7uV
2V Range	-0.2200000V	-0.2200006V	0.9uV
2V Range	-1.0000000V	-1.0000022V	2.1uV
2V Range	-2.0000000V	-2.0000016V	7uV
20V Range	2.200 000V	2.200 016V	7uV
20V Range	10.000 000V	10.000 014V	33uV
20V Range	20.000 000V	20.000 001V	66uV
20V Range	-2.200000V	-2.199991V	7uV
20V Range	-10.000000V	-9.999964V	33uV
20V Range	-20.000000V	-19.999951V	66uV
200V Range	100.000 00V	99.999 70V	330uV
200V Range	200.000 00V	199.999 36V	660uV
200V Range	-200.00000V	-199.99988V	660uV
200V Range	-100.00000V	-100.00031V	330uV
1kV Range	220.000 0V	219.999 9V	0.8mV
1kV Range	1 000.000 0V	999.998 8V	3.3mV
1kV Range	-1000.0000V	-1000.0003V	3.3mV
1kV Range	-220.0000V	-220.0016V	0.8mV
AC Voltage Output Frequency Tests			
10kHz at 2V	10.000 00kHz	9.999 99kHz	0.01Hz
100kHz at 2V	100.000 0kHz	99.999 9kHz	0.1Hz
AC Voltage Measurements			
200mV A.C. : 40Hz	20.000mV	19.996mV	20uV
200mV A.C. : 206Hz	20.000mV	19.997mV	20uV
200mV A.C. : 500kHz #	20.000mV	19.942mV	140uV
200mV A.C. : 10Hz#	200.000mV	200.006mV	60uV
200mV A.C. : 40Hz	200.000mV	199.983mV	46uV
200mV A.C. : 56Hz	200.000mV	200.009mV	46uV
200mV A.C. : 206Hz	200.000mV	199.999mV	46uV
200mV A.C. : 1kHz	200.000mV	199.972mV	46uV
200mV A.C. : 10kHz	200.000mV	200.024mV	46uV
200mV A.C. : 20kHz	200.000mV	200.038mV	70uV
200mV A.C. : 100kHz#	200.000mV	200.005mV	680uV
200mV A.C. : 500kHz#	200.000mV	200.013mV	680uV
2V Range : 40Hz	0.210 00V	0.209 94V	49uV
2V Range : 206Hz	0.210 00V	0.210 03V	49uV
2V Range : 500kHz #	0.210 00V	0.211 26V	0.8mV
2V Range. : 206Hz	1.000 00V	1.000 06V	120uV
2V Range : 206Hz	1.500 00V	1.500 11V	180uV

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Test Title	Applied Value	Reading	Uncertainties
2V Range : 10Hz#	2.000 00V	2.000 10V	600uV
2V Range : 40Hz	2.000 00V	1.999 32V	240uV
2V Range : 56Hz	2.000 00V	1.999 92V	240uV
2V Range : 206Hz	2.000 00V	1.999 99V	240uV
2V Range : 1kHz	2.000 00V	1.999 72V	240uV
2V Range : 5kHz	2.000 00V	2.000 01V	400uV
2V Range : 10kHz	2.000 00V	1.999 99V	400uV
2V Range : 20kHz	2.000 00V	2.000 00V	400uV
2V Range : 50kHz	2.000 00V	2.000 11V	400uV
2V Range : 100kHz#	2.000 00V	1.999 89V	4.8mV
2V Range : 500kHz#	2.000 00V	2.000 56V	4.8mV
20V Range : 40Hz	2.100 0V	2.100 1V	260uV
20V Range : 206Hz	2.100 0V	2.100 2V	260uV
20V Range : 100kHz #	2.100 0V	2.099 9V	5mV
20V Range : 200Hz	10.000 0V	10.000 2V	1.2mV
20V Range : 200Hz	15.000 0V	14.999 1V	1.8mV
20V Range : 10Hz#	20.000 0V	20.000 1V	4.2mV
20V Range : 40Hz	20.000 0V	19.998 9V	2.4mV
20V Range : 56Hz	20.000 0V	20.000 2V	2.4mV
20V Range : 206Hz	20.000 0V	19.999 6V	2.4mV
20V Range : 1kHz	20.000 0V	20.002 0V	2.4mV
20V Range : 5kHz	20.000 0V	20.000 1V	4mV
20V Range : 10kHz	20.000 0V	20.000 1V	4mV
20V Range : 20kHz	20.000 0V	19.999 7V	4mV
20V Range : 100kHz #	20.000 0V	19.998 2V	41mV
200V Range : 40Hz	21.000V	20.994V	2.6mV
200V Range : 206Hz	21.000V	20.997V	2.6mV
200V Range : 20kHz	21.000V	21.009V	4.2mV
200V Range : 206Hz	100.000V	100.008V	12mV
200V Range : 30Hz#	200.000V	200.002V	42mV
200V Range : 40Hz	200.000V	199.991V	24mV
200V Range : 56Hz	200.000V	199.998V	24mV
200V Range : 206Hz	200.000V	199.994V	24mV
200V Range : 1000Hz	200.000V	199.987V	24mV
200V Range : 10kHz	200.000V	199.982V	40mV
200V Range : 20kHz	200.000V	199.996V	40mV
1kV Range : 40Hz	210.000V	209.986V	45mV
1kV Range : 206Hz	210.000V	210.021V	45mV
1kV Range : 10kHz	210.000V	209.960V	45mV
1kV Range : 30Hz#	700.000V	699.999V	230mV
1kV Range : 40Hz	700.000V	699.944V	148mV
1kV Range : 56Hz	700.000V	700.003V	148mV
1kV Range : 1kHz	700.000V	700.096V	148mV
1kV Range : 5kHz	700.000V	699.903V	148mV
1kV Range : 10kHz	700.000V	699.837V	148mV
1kV Range : 56Hz	1 000.000V	1 000.157V	210mV
Linearity - 20V DC Range			
Linearity	19.000 000V	18.999 992V	63uV
Linearity	18.000 000V	18.000 004V	60uV

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Linearity	17.000 000V	16.999 991V	57uV
Linearity	16.000 000V	15.999 992V	53uV
Linearity	15.000 000V	15.000 011V	50uV
Linearity	14.000 000V	13.999 970V	47uV
Linearity	13.000 000V	13.000 002V	43uV
Linearity	12.000 000V	12.000 004V	40uV
Linearity	11.000 000V	10.999 991V	37uV
Linearity	9.000 000V	9.000 027V	30uV
Linearity	8.000 000V	8.000 020V	27uV
Linearity	7.000 000V	6.999 991V	24uV
Linearity	6.000 000V	6.000 027V	20uV
Linearity	5.000 000V	5.000 021V	17uV
Linearity	4.000 000V	4.000 017V	14uV
Linearity	3.000 000V	3.000 028V	10uV
Linearity	2.100 000V	2.100 023V	7uV
Linearity	-19.000000V	-18.999943V	63uV
Linearity	-18.000000V	-17.999963V	60uV
Linearity	-17.000000V	-16.999979V	57uV
Linearity	-16.000000V	-15.999991V	53uV
Linearity	-15.000000V	-14.999996V	50uV
Linearity	-14.000000V	-14.000007V	47uV
Linearity	-13.000000V	-12.999986V	43uV
Linearity	-12.000000V	-12.000013V	40uV
Linearity	-11.000000V	-11.000015V	37uV
Linearity	-9.000000V	-9.000000V	30uV
Linearity	-8.000000V	-7.999996V	27uV
Linearity	-7.000000V	-6.999995V	24uV
Linearity	-6.000000V	-6.000006V	20uV
Linearity	-5.000000V	-5.000004V	17uV
Linearity	-4.000000V	-4.000001V	14uV
Linearity	-3.000000V	-3.000014V	10uV
Linearity	-2.100000V	-2.100013V	7uV
DC CURRENT			
200uA Range	0.000 0uA	-0.0006uA	0.2nA
200uA Range	100.000 0uA	99.999 4uA	0.2nA
200uA Range	200.000 0uA	199.997 8uA	2.7nA
200uA Range	-100.0000uA	-99.9998uA	0.2nA
200uA Range	-200.0000uA	-200.0009uA	2.7nA
2mA Range	0.210 000mA	0.210 001mA	2.7nA
2mA Range	1.000 000mA	1.000 006mA	0.2nA
2mA Range	2.000 000mA	2.000 001mA	34nA
2mA Range	-1.000000mA	-0.999994mA	0.2nA
2mA Range	-2.000000mA	-2.000005mA	34nA
20mA Range	5.000 00mA	5.000 04mA	34nA
20mA Range	10.000 00mA	10.000 08mA	34nA
20mA Range	15.000 00mA	14.999 94mA	380nA
20mA Range	20.000 00mA	20.000 03mA	380nA
20mA Range	-5.000000mA	-4.99996mA	34nA
20mA Range	-10.000000mA	-9.99996mA	34nA
20mA Range	-15.000000mA	-15.00008mA	380nA

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Test Title	Applied Value	Reading	Uncertainties
20mA Range	-20.00000mA	-20.00006mA	380nA
200mA Range	100.000 0mA	99.999 9mA	380nA
200mA Range	200.000 0mA	199.999 9mA	8.7uA
200mA Range	-100.0000mA	-99.9996mA	380nA
200mA Range	-200.0000mA	-200.0003mA	8.7uA
2A Range	1.000 000A	0.999 976A	8.7uA
2A Range	2.000 000A	1.999 980A	96uA
2A Range	-1.000000A	-0.999973A	8.7uA
2A Range	-2.000000A	-1.999990A	96uA
30A Range	10.000 00A	10.001 25A	0.48mA
30A Range	20.000 00A	20.000 53A	0.68mA
30A Range #	30.000 00A	30.004 62A	1.5mA
30A Range #	-30.00000A	-29.99889A	1.5mA
30A Range	-20.00000A	-20.00092A	0.68mA
30A Range	-10.00000A	-10.00126A	0.48mA
AC CURRENT			
200uA Rng: 40Hz	25.000uA	24.991uA	15nA
200uA Rng: 206Hz	25.000uA	24.989uA	15nA
200uA Rng: 10kHz#	25.000uA	24.974uA	49nA
200uA Rng: 10Hz#	200.000uA	200.001uA	260nA
200uA Rng: 40Hz	200.000uA	200.003uA	49nA
200uA Rng: 56Hz	200.000uA	200.001uA	49nA
200uA Rng: 1kHz	200.000uA	200.008uA	49nA
200uA Rng: 10kHz#	200.000uA	200.002uA	247nA
2mA Rng: 40Hz	0.210 00mA	0.210 02mA	55nA
2mA Rng: 206Hz	0.210 00mA	0.210 01mA	55nA
2mA Rng: 10kHz#	0.210 00mA	0.210 00mA	0.19uA
2mA Rng: 10Hz#	2.000 00mA	2.000 02mA	2.6uA
2mA Rng: 40Hz	2.000 00mA	2.000 18mA	400nA
2mA Rng: 56Hz	2.000 00mA	2.000 10mA	400nA
2mA Rng: 1kHz	2.000 00mA	2.000 00mA	400nA
2mA Rng: 10kHz#	2.000 00mA	2.000 01mA	1.8uA
20mA Rng: 40Hz	2.100 0mA	2.100 2mA	430nA
20mA Rng: 206Hz	2.100 0mA	2.100 0mA	430nA
20mA Rng: 10kHz#	2.100 0mA	2.098 2mA	1.9uA
20mA Rng: 56Hz	10.000 0mA	10.001 5mA	2uA
20mA Rng: 10Hz#	20.000 0mA	20.000 0mA	26uA
20mA Rng: 40Hz	20.000 0mA	20.000 7mA	4uA
20mA Rng: 1kHz	20.000 0mA	20.001 5mA	4uA
20mA Rng: 10kHz#	20.000 0mA	19.992 8mA	18uA
200mA Rng: 40Hz	21.000mA	21.003mA	4.2uA
200mA Rng: 206Hz	21.000mA	21.002mA	4.2uA
200mA Rng: 10kHz	21.000mA	20.987mA	19uA
200mA Rng: 10Hz#	200.000mA	199.996mA	260uA
200mA Rng: 40Hz	200.000mA	200.008mA	40uA
200mA Rng: 56Hz	200.000mA	200.002mA	40uA
200mA Rng: 1kHz	200.000mA	200.004mA	40uA

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200mA Rng: 10kHz#	200.000mA	200.060mA	180uA
2A Rng: 40Hz	0.210 00A	0.209 96A	42uA
2A Rng: 206Hz	0.210 00A	0.209 95A	42uA
2A Rng: 5kHz#	0.210 00A	0.210 17A	0.19mA
2A Rng: 10Hz#	2.000 00A	1.999 96A	2.6mA
2A Rng: 40Hz	2.000 00A	1.999 86A	0.5mA
2A Rng: 56Hz	2.000 00A	2.000 05A	0.5mA
2A Rng: 1kHz	2.000 00A	1.999 54A	0.5mA
2A Rng: 5kHz #	2.000 00A	2.001 19A	1.8mA
30A Rng: 40Hz	2.100 00A	2.100 27A	530uA
30A Rng: 206Hz	2.100 00A	2.100 04A	530uA
30A Rng: 10Hz#	20.000 00A	20.000 55A	26mA
30A Rng: 40Hz	20.000 00A	19.999 55A	5mA
30A Rng: 56Hz	20.000 00A	20.000 87A	5mA
30A Rng: 100Hz	20.000 00A	20.007 88A	5mA
30A Rng: 1kHz #	20.000 00A	20.010 77A	5mA
30A Rng: 56Hz#	30.000 00A	29.997 22A	8mA

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2 Wire Resistance measured as value at terminals.			
0 Ω 2 Wire	0.156 0 Ω	0.156 9 Ω	0.8m Ω
0.1 Ω 2 Wire	0.261 0 Ω	0.261 9 Ω	0.8m Ω
1 Ω 2 Wire	1.244 0 Ω	1.244 3 Ω	0.8m Ω
10 Ω 2 Wire	10.169 Ω	10.169 Ω	1m Ω
100 Ω 2 Wire	100.163 Ω	100.163 Ω	1.3m Ω
1k Ω 2 Wire	1.000 189k Ω	1.000 189k Ω	3.8m Ω
10k Ω 2 Wire	10.000 47k Ω	10.000 47k Ω	21m Ω
100k Ω 2 Wire	99.994 3k Ω	99.994 2k Ω	620m Ω
1M Ω 2 Wire	1.000 199M Ω	1.000 197M Ω	14 Ω
10M Ω 2 Wire	10.003 40M Ω	10.002 68M Ω	150 Ω
100M Ω 2 Wire	99.943 0M Ω	99.940 6M Ω	4.5k Ω
1000M Ω 2 Wire	1 002.17M Ω	999.99M Ω	390k Ω
Simulated Ohms			
100 R Range	30.000 0 Ω	29.991 2 Ω	1m Ω
100 R Range	100.000 0 Ω	99.999 1 Ω	1m Ω
1k Ω Range	300.000 0 Ω	299.986 1 Ω	1m Ω
1k Ω Range	1.000 00k Ω	1.000 03k Ω	10m Ω
10k Ω Range	3.000 0k Ω	2.999 5k Ω	100m Ω
10k Ω Range	10.000 0k Ω	10.000 1k Ω	0.1 Ω
100k Ω Range	30.000k Ω	30.000k Ω	1 Ω
100k Ω Range	100.000k Ω	99.996k Ω	1.3 Ω
1M Ω Range	300.000k Ω	299.970k Ω	5.4 Ω
1M Ω Range	1.000 00M Ω	0.999 99M Ω	18 Ω
10M Ω Range	3.000 0M Ω	2.999 6M Ω	220 Ω
10M Ω Range	10.000 0M Ω	10.000 1M Ω	730 Ω
4 Wire Ohms Measured relative to Zero			
100m Ω 4 Wire	100.00m Ω	100.42m Ω	132u Ω
1 Ω 4 Wire	1.002 24 Ω	1.002 25 Ω	143u Ω
10 Ω 4 Wire	10.002 560 Ω	10.002 579 Ω	150u Ω
100 Ω 4 Wire	100.001 04 Ω	100.001 19 Ω	0.4m Ω
1k Ω 4 Wire	1.000 022 1k Ω	1.000 021 9k Ω	3m Ω
10k Ω 4 Wire	10.000 284k Ω	10.000 282k Ω	12m Ω
100k Ω 4 Wire	99.994 30k Ω	99.993 32k Ω	800m Ω
PT100 Resistance Option			
PT100 PRT Resistance	-99.960 $^{\circ}$ C	-99.955 $^{\circ}$ C	0.01 $^{\circ}$ C
PT100 PRT Resistance	0.069 $^{\circ}$ C	0.069 $^{\circ}$ C	0.01 $^{\circ}$ C
PT100 PRT Resistance	30.073 $^{\circ}$ C	30.073 $^{\circ}$ C	0.01 $^{\circ}$ C
PT100 PRT Resistance	60.010 $^{\circ}$ C	60.010 $^{\circ}$ C	0.01 $^{\circ}$ C
PT100 PRT Resistance	99.945 $^{\circ}$ C	99.946 $^{\circ}$ C	0.01 $^{\circ}$ C
PT100 PRT Resistance	199.890 $^{\circ}$ C	199.894 $^{\circ}$ C	0.01 $^{\circ}$ C
PT100 PRT Resistance	399.860 $^{\circ}$ C	399.857 $^{\circ}$ C	0.01 $^{\circ}$ C
PT100 PRT Resistance	799.430 $^{\circ}$ C	799.435 $^{\circ}$ C	0.01 $^{\circ}$ C
Capacitance @ 1kHz Measured Cp up to 1uF, Cs above			
1nF	1.084 5nF	1.084 6nF	2pF
10nF	9.988nF	9.987nF	20pF
20nF	19.741nF	19.744nF	40pF
50nF	49.933nF	49.931nF	100pF
100nF	99.16nF	99.15nF	100pF
1uF	0.987 3uF	0.987 3uF	0.25nF
10uF	9.977uF	9.977uF	23nF
Simulated Capacitance			
100uF #	99.25uF	99.25uF	85nF

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1mF #	0.984mF	0.984mF	3.3uF
10mF #	9.760mF	9.750mF	36uF
Manual Inductance @ 1kHz. measured Ls up to 1H. Lp above			
Inductance @ 1kHz	1.024mH	1.023mH	1.3uH
Inductance @ 1kHz	9.848mH	9.835mH	4uH
Inductance @ 1kHz#	18.720mH	18.720mH	5uH
Inductance @ 1kHz#	28.580mH	28.581mH	6uH
Inductance @ 1kHz#	49.210mH	49.202mH	15uH
Inductance @ 1kHz	98.23mH	98.22mH	40uH
Inductance @ 1kHz	0.986 0H	0.986 0H	400uH
Inductance @ 1kHz #	10.260H	10.266H	6mH
1 ppm Frequency Option			
Frequency	10.000 000MHz	10.000 002MHz	
Frequency	1.000 000 0MHz	0.999 999 8MHz	
Frequency	100.000 00kHz	99.999 97kHz	
Frequency	50.000 000kHz	50.000 000kHz	
Frequency	20.000 000kHz	19.999 994kHz	
Frequency	10.000 000kHz	9.999 998kHz	
Frequency	1.000 000 0kHz	0.999 999 3kHz	
Frequency	100.000 00Hz	100.000 00Hz	
Amplitude Output - DC Voltage			
2mV/Div	12.000 0mV	11.988 9mV	1uV
5mV/Div	30.000 0mV	29.993 1mV	1uV
10mV/Div	60.000 0mV	60.000 4mV	1.2uV
20mV/Div	120.000mV	119.978mV	1.3uV
50mV/Div	300.000mV	299.984mV	2.6uV
100mV/Div	600.000mV	600.000mV	5.1uV
200mV/Div	1.200 00V	1.199 98V	10uV
500mV/Div	3.000 00V	2.999 98V	12uV
1V/Div	6.000 00V	5.999 97V	20uV
2V/Div	12.000 00V	11.999 38V	38uV
5V/Div	30.000 0V	29.998 4V	100uV
10V/Div	60.000 0V	59.996 7V	200uV
20V/Div	120.000 0V	119.993 3V	400uV
Timebase Output			
20ns/Div	50.000 00MHz	49.999 95MHz	10Hz
50ns/Div	20.000 00MHz	19.999 98MHz	10Hz
100ns/Div	10.000 00MHz	10.000 00MHz	10Hz
200ns/Div	5.000 000MHz	5.000 000MHz	1Hz
500ns/Div	2.000 000MHz	2.000 000MHz	1Hz
1us/Div	1.000 000MHz	1.000 000MHz	1Hz
2us/Div	500.000 0kHz	500.000 0kHz	100mHz
5us/Div	200.000 0kHz	200.000 0kHz	100mHz
10us/Div	100.000 0kHz	100.000 0kHz	100mHz
20us/Div	50.000 00kHz	50.000 00kHz	10mHz
50us/Div	20.000 00kHz	20.000 00kHz	10mHz
100us/Div	10.000 00kHz	10.000 00kHz	10mHz
200us/Div	5.000 000kHz	5.000 000kHz	1mHz
500us/Div	2.000 000kHz	2.000 000kHz	1mHz
1ms/Div	1.000 000kHz	1.000 000kHz	1mHz
2ms/Div	500.000 0Hz	500.000 0Hz	100uHz
5ms/Div	200.000 0Hz	200.000 0Hz	100uHz

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Test Title	Applied Value	Reading	Uncertainties
10ms/Div	100.000 0Hz	100.000 0Hz	100uHz
20ms/Div	50.000 00Hz	50.000 00Hz	10uHz
50ms/Div	20.000 00Hz	20.000 00Hz	10uHz
100ms/Div	10.000 00Hz	10.000 00Hz	10uHz
200ms/Div	5.000 00Hz	5.000 00Hz	10uHz
500ms/Div	2.000 00Hz	2.000 00Hz	10uHz
1s/Div	1.000 00Hz	1.000 00Hz	10uHz
600 MHz Frequency Sweep Output			
10MHz	10.000 00MHz	9.999 99MHz	20Hz
300MHz	300.000 0MHz	299.999 6MHz	600Hz
600MHz	600.000 0MHz	599.999 3MHz	1.2kHz
600MHz Bandwidth Level output into 50Ω Pk-Pk			
Level @ 5MHz#	600mV	600mV	23mV
Level @ 250MHz#	600mV	600mV	23mV
Level @ 600MHz#	600mV	600mV	23mV
50kHz Reference level			
BW ref frequency	50.000kHz	50.000kHz	1Hz
BW ref level Adj	0.213V	0.213V	1mV
BW ref level #	0.213V	0.213V	1mV
Fast Rise output 600mV/10nS			
Fast Rise output	---	Pass	
Power Option: AC Voltage Measurements (Current out = 3A)			
20V Range : 56Hz	20.000V	20.000V	2.4mV
200V Range : 60Hz	50.000V	50.009V	6mV
200V Range : 60Hz	100.000V	100.010V	12mV
200V Range : 45Hz	200.000V	199.990V	24mV
200V Range : 60Hz	200.000V	199.994V	24mV
200V Range : 400Hz	200.000V	199.997V	24mV
1000V Range : 60Hz	500.000V	500.024V	105mV
Power Option: AC Current (Voltage out = 20V)			
3A Rng: 56Hz	0.600 00A	0.600 18A	0.8mA
3A Rng: 56Hz	0.600 00A	0.600 16A	0.8mA
30A Rng: 56Hz	3.000 00A	3.000 76A	0.8mA
30A Rng: 56Hz	5.000 00A	5.001 14A	1.3mA
30A Rng: 45Hz	10.000 00A	10.001 11A	2.5mA
30A Rng: 56Hz	10.000 00A	10.000 56A	2.5mA
30A Rng: 206Hz	10.000 00A	9.996 91A	2.5mA
30A Rng: 56Hz	15.000 00A	14.996 66A	3.8mA
2A Rng: 56Hz	2.000 00A	2.000 12A	0.5mA
2A Rng: 56Hz	0.500 00A	0.500 16A	125uA
DC Current output on Power (DC Voltage out = 20V)			
30A DC Rng	20.000 00A	19.998 30A	1mA
30A DC Rng	3.000 00A	2.999 60A	144uA
2A DC Rng	2.000 00A	2.000 05A	96uA
2A DC Rng	0.300 00A	0.300 04A	10uA

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Test Title	Applied Value	Reading	Uncertainties
DC Voltage output on Power (DC Current = 3Amp)			
20V Range DC	20.000 0V	20.000 0V	100uV
200V Range DC	200.000V	199.997V	1mV
1000V Range DC	500.000V	499.997V	1.7mV
Phase Angle, Measured at 150V/5A 50Hz AC			
0° Phase Angle#	0.00°	0.00°	0.05°
60° Phase Angle#	60.00°	60.00°	0.05°
90° Phase Angle#	90.00°	90.00°	0.05'
Harmonic Generation Measurements @ 50Hz fundamental, 20V/5A			
3rd Harmonic#	5.0pc	5.0pc	0.05pc
3rd Harmonic#	10.0pc	9.9pc	0.05pc
5th Harmonic#	10.0pc	10.0pc	0.05pc
12th Harmonic#	10.0pc	9.7pc	0.05pc
21th Harmonic#	10.0pc	9.4pc	0.05pc

End of test results