



REPORT OF CALIBRATION

This instrument is calibrated and tested to verify compliance with Martel's test specifications for all ranges and parameters required to meet 1 year performance specifications. The calibration uses measurement standards traceable to the National Institute of Standards and Technology (NIST). This calibration complies with the requirements of ANSI/NCSS Z540-1-1994 part 2. Calibration and verification are performed at an ambient temperature of $23 \pm 5^{\circ}\text{C}$ and relative humidity of $> 20\%$ to $< 70\%$.


Any test uncertainty (TUR) less than 4:1 appears under the TUR heading on the data record. Where the TUR meets or exceeds 4:1, the TUR field is blank.

Tom Fatur

Tom Fatur
President

Nancy Fligg

Calibrated By
Nancy Fligg

Manufacturer:	Martel Corporation	Cal Date:	December 30, 2013
Model:	MC1000	Report Date:	December 30, 2013
Serial Number:	009645	Temperature:	21.2°C
		Relative Humidity:	41 %
Calibration Procedure:	MC1000:(1 year)CAL/FINAL VER RS-232/5500,3458 24 20 J		
Procedure Revision:	2.0		

Standards Used

Asset	Manufacturer	Model Number	Description	Cal. Date	Due Date
6685015	Fluke	5500A	Calibrator	3-Apr-13	3-Apr-14
2823A27592	Hewlett Packard	3458A	Multimeter	6-Sep-13	5-Sep-14

Test Data

PARAMETER	RESULT	ACCEPTANCE LIMITS		TUR
		LOW	HIGH	
THERMOCOUPLE READ VERIFICATION				
-180.00degC	-179.90	-181.00	-179.00	PASS 3.7
0.00degC	0.00	-0.70	0.70	PASS
1200.00degC	1200.00	1199.30	1200.70	PASS 3.0
THERMOCOUPLE SOURCE VERIFICATION				
-180.00degC	-180.19	-181.00	-179.00	PASS 3.7
0.00degC	-0.13	-0.70	0.70	PASS
1200.00degC	1199.89	1199.30	1200.70	PASS 3.0
mA READ VERIFICATION				
4.000mA	4.000	3.997	4.003	PASS
12.000mA	12.000	11.996	12.004	PASS
24.000mA	24.000	23.993	24.007	PASS
mA SOURCE VERIFICATION				
4.0000mA	4.0005	3.9967	4.0033	PASS
12.0000mA	12.0003	11.9956	12.0044	PASS
24.0000mA	23.9999	23.9932	24.0068	PASS
OHM/RTD SOURCE VERIFICATION				
15.000 Ohm	15.005	14.900	15.100	PASS
300.000 Ohm	300.001	299.900	300.100	PASS

MET/CAL RunTime Report: Calibration Results

Page 1 of 2

Calibration Report Number: 12494812302013 009645

PARAMETER	RESULT	ACCEPTANCE LIMITS		TUR
		LOW	HIGH	
500.00 Ohm	499.99	499.50	500.50	PASS
1000.00 Ohm	999.98	999.50	1000.50	PASS
3200.00 Ohm	3200.03	3199.00	3201.00	PASS
OHM/RTD READ VERIFICATION				
15.00 Ohm	14.99	14.90	15.10	PASS
300.00 Ohm	299.98	299.90	300.10	PASS
500.00 Ohm	500.00	499.50	500.50	PASS
1000.0 Ohm	999.9	999.5	1000.5	PASS
3200.0 Ohm	3199.9	3199.0	3201.0	PASS
3W OHM/RTD READ VERIFICATION				
300.0 Ohm	300.0	298.5	301.5	PASS
VOLTAGE READ VERIFICATION				
0.000V	0.000	-0.002	0.002	PASS
5.000V	4.999	4.997	5.003	PASS
10.000V	9.999	9.996	10.004	PASS
20.000V	19.999	19.994	20.006	PASS
(KHz) FREQUENCY READ VERIFICATION				
9.00KHz	9.01	8.98	9.02	PASS
mV READ VERIFICATION				
0.00mV	0.00	-0.02	0.02	PASS
45.00mV	44.99	44.97	45.03	PASS
75.00mV	75.00	74.96	75.04	PASS
HIGH VOLTAGE DC VERIFICATION				
1.0V	0.9	0.5	1.5	PASS
125.0V	124.9	124.5	125.5	PASS
250.0V	249.9	249.5	250.5	PASS
HIGH VOLTAGE AC VERIFICATION				
1.0V	1.1	0.5	1.5	PASS
125.0V	124.9	124.5	125.5	PASS
250.0V	249.9	249.5	250.5	PASS
VOLTAGE SOURCE VERIFICATION				
0.0000V	-0.0000	-0.0020	0.0020	PASS
10.0000V	9.9998	9.9960	10.0040	PASS
20.0000V	19.9997	19.9940	20.0060	PASS
(KHz) FREQUENCY SOURCE VERIFICATION				
10000Hz @ 5V	10000	9980	10020	PASS
mV SOURCE VERIFICATION				
0.000mV	-0.001	-0.030	0.030	PASS
30.000mV	29.998	29.970	30.030	PASS
75.000mV	74.998	74.960	75.040	PASS

End of Test Data