

**VC 14 Plus**

**Temperature Calibrator**



LVD EN 61010-1: 2003

EMC 2004/10/EC



- Pt100, Pt200, Pt500. Pt1000, Cu10, Cu50 with 3-wire, 4-wire configurations.
- 10 types thermocouple: Type: K, E, J, T, B, N, R, S, L and U with cold junction.
- Blue back light illumination with timer cut off.
- Individual digit setting switch - Rapid setting of output values.
- mV source and measure, of 100.000mV and 10000.00 mV
- Continuity test with beeping sound.
- HOLD AVG and T.DISP in dual display of: temperature and mV for Thermocouple or temperature and Ohms for RTD.
- Soft pouch for storage.
- Battery energy level indicator
- Fuse protection
- Test leads and crocodile clips attachments
- Overall accuracy of 0.02% of reading.



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# VC 14 Plus

# Temperature Calibrator

## SOURCE FUNCTION

Condition: Temperature: 18°C to 28°C 35% to 70% RH

Function	Ref	Range	Res	Accuracy	Remarks
DC Voltage	100mV	-10.000mV~110.000mV	1uV	0.02 +0.01	Max. output current 0.5mA
	1000mV	-100.00V~1100.00V	10uV	0.02+0.01	Max. output current 2mA
Resistance	400	0.00 ~400.00	0.01	0.02 + 0.025	Excite current +/-0.5~3mA; if +/- 0.1~0.5, add 0.1 ; Does not include lead resistance
TC	R	0°C~1767°C	1°C	0~100°C : 1.5°C	By using the ITS-90 thermocouple scale, the accuracy does not include the error of internal temperature compensator sensor
				100~1767°C : 1.2°C	
	S	0°C~1767°C		0~100°C : 1.5°C	
				100~1767°C : 1.2°C	
	K	-200.0~1372°C	0.1°C	-200~100°C : 0.6°C	
				100~400°C : 0.5°C	
				400~1200°C : 0.7°C	
	1200~1372°C : 0.9°C				
	E	-200.0~1000.0°C		-200~100°C : 0.6°C	
				100~600°C : 0.5°C	
	J	-200~1200.0°C	600~1000°C : 0.4°C		
			-200~100°C : 0.6°C		
	T	-250.0~400.0°C	100~800°C : 0.5°C		
			800~1200°C : 0.7°C		
N	-200.0~1300.0°C	-250~400°C : 0.6°C			
		-200~100°C : 1.0°C			
B	600~1820°C	1°C	100~900°C : 0.7°C		
			900~1300°C : 0.8°C		
			600~800°C : 1.5°C		
			800~1820°C : 1.1°C		
L	-200~900°C	-200~0°C : 0.7°C			
		0~900°C : 0.5°C			
U	-200~600°C	-200~0°C : 0.7°C			
		0~600°C : 0.5°C			
RTD	PT100-385	-200.0~800.0°C	0.1°C	-200~0°C : 0.1°C	Using PT100-385 thermographic resistance curve, excite current +/- 0.1mA, for PT200, PT500, and PT1000, this does not include lead resistance.
				0 ~400°C : 0.5°C	
	400~800°C : 0.8°C				
	PT200-385	-200~630°C		-200~100°C : 0.8°C	
				100~300°C : 0.9°C	
	PT500-385	-200~630°C		300~630°C : 1.0°C	
				-200~100°C : 0.4°C	
	PT1000-385	-200~630°C		100~300°C : 0.5°C	
300~630°C : 0.7°C					
Cu10	-10.0°C~250.0°C	-200~100°C : 0.2°C			
		100~300°C : 0.5°C			
Cu50	-50.0~150.0°C	300~630°C : 0.7°C			
		-10~250°C : 1.8°C			
				-50~150°C : 0.6°C	



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# VC 14 Plus

# Temperature Calibrator

MEASURE FUNCTION		Condition: Temperature: 18°C to 28°C 35% to 70% RH				
Function	Ref	Range	Res	Accuracy	Remarks	
DC Voltage	50mV	-5.000~55.000mV	1uV	0.02 +0.02	Input Resistance: 100M	
	500mV	-50.00~550.00mV	10uV	0.02+0.01		
OHM	500	0.00 ~550.00	0.01	0.05+0.02	500 : Excite current approx 1mA 5k : Excite current approx 0.1mA O/C voltage about 2.5V. Does not include lead resistance	
	5k	0.0000k ~5.5000k	0.1	0.05+0.02		
TC	R	0°C~1767°C	1°C	0~500°C : 1.8°C 500~1767°C : 1.5°C	By using the ITS-90 thermocouple scale, the accuracy does not include the error of internal temperature compensator sensor	
	S	0°C~1767°C				
	K		-100°C~1372°C			-100.0~0.0°C : 1.2°C
				0.1°C		0.0~1372.0°C : 0.8°C
	E		-50.0°C ~ 850.0°C			-50.0°C~0.0°C : 0.9°C
						0.0~850.0°C : 1.5°C
	J		-60.0°C~1120.0°C			-60.0~0.0°C : 1.0°C
						0.0~1120.0°C : 0.7°C
	T		-100.0°C~400.0°C			-100.0~0.0°C : 1.0°C
						0.0~400.0°C : 0.7°C
	N		-200~1300.0°C			-200.0~0.0°C : 1.5°C
						0.0~1300.0°C : 0.9°C
	B		600°C~1820°C	1°C		600~800°C : 2.2°C
800~1000c : 1.8°C						
1000~1820c : 1.4°C						
L		-60°C~900°C	0.1°C	-60.0~0.0°C : 0.7°C		
				0.0~900.0°C : 0.5°C		
U		-100°C~600°C	0.1°C	-100.0~0.0°C : 0.7°C		
				0.0~600.0°C : 0.5°C		
RTD	PT100 385	-200.0°C~800.0°C	0.1°C	-200.0~0.0°C : 0.5°C	Using PT100-385 thermographic resistance curve, does not include lead resistance. Assuming all three RTD leads are matched for 3-wire input,	
				0.0°C~400.0°C : 0.7°C		
				400.0°C~800.0°C : 0.8°C		
	PT200 385	-200~630°C	0.1°C	-200.0~100.0°C : 0.8°C		
				100.0°C~300.0°C : 0.9°C		
				300.0°C~630.0°C : 1.0°C		
	PT500 385	-200~630°C	0.1°C	100~300°C : 0.9°C		
300~630°C : 1.0°C						
PT1000 385	-200~630°C			-200~100°C : 0.4°C		
Cu10	-10.0°C~260.0°C			1.8		
CU50	-50.0°C ~ 150.0°C			0.7		
CONT.	500	?50 SOUND	0.01		Excitation current about 1mA	



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