INSTRUKART
YOUR WORLDWIDE INSTRUMENT PARTNER

BTH Hand Held Instruments

HANDY CALIBRATOR

Model C9

Description

Output Ranges for Caliberation (Source)

Function	Range	Set Range	Resolution	Accuracy	Accuracy Remark
OHM	400.0 Ohm	0 to 400.0 Ohms	0.1	0.5% + 4	1mA exciting current without accessory lead resistance
DCmV	100.00mV	-10.00mV to 100.00mV	0.01mV	0.5% + 4	Max Output Current 5mA
DC V	5.0000V	-0.5000V to 5.5000V	0.1mV	0.2% + 4	Max Output Current 5mA
Frequency	100.0Hz	1.0Hz to 110.0Hz	0.1Hz	0.2% + 2	Square Wave 50% Duty Cycle Ratio 5V p-p
	1.00KHz	0.100KHz to 1.100KHz	1 Hz	0.2% +2	
	10.0KHz	1.0KHz to 11.0KHz	0.1KHz	0.2% + 2	
Analog Transducer XMT	-20.00mA	0 to -22.00mA	0.01mA	0.2% + 4	External Power Supply 28V Max load 1K ohm at 20mA
DC mA	20.000mA	0 to 22.000mA	0.001mA	0.2% + 4	Internal Power Supply: 15V Max Load: 500ohms at 20mA
RTD	PT-100	-200.0C. to 850.0C.	0.1C.	0.5% + 6	By using Pt-100-385 Temperature without accessories lead resistance
	Cu 50	-50.0C. to 150.0C.	0.1C.	0.5% + 6	
TC	R	-40C. to 1760C.	1C.	0.5%+3(<100C.) 0.5%+2 (>100C.)	By using ITS-90 temperature Note: The accuracy does not include the error of internal temperature compensation caused by the sensor
	S	-20C. to 1760C.			
	K	-200.0C. to 1370.0C.	0.1C.	0.5% +20 (<-100C.) 0.2% +10 (>-100C.)	
	E	-200.0C. to 1000.0C.			
	J	-200.0C. to 1200.0C.			
	T	-200.0C. to 400.0C.			
	N	-200.0C. to 1300.0C.			
	B	-40C. to 1760C.	1C.	0.5%+3(<600C.) 0.5%+2 (>600C.)	

Process Meter Measurement

Range	Resolution	Accuracy, ± (% of Reading+Counts)	Remarks
DC Voltage Measurement			
4.000V	0.001V	0.2% + 4	Measuring Impedance: 10MOhm (nominal)<100pF Common mode rejection ratio:50Hz or 60Hz >100dB Normal mode rejection ratio: 50Hz or 60Hz. >45dB Over Voltage protection: 600Vp-p
40.00V	0.01	0.2% + 4	
400.0V	0.1V	0.2% + 4	
DC mV Measurement			
40.00mV	0.01mV	0.5% + 6	Measuring Impedance: 10MOhm (nominal) Over Voltage protection: 600Vp-p
400.0mV	0.1mV	0.2% + 4	
AC Voltage Measurement			
400.0mV	0.1mV	1.0% + 4	Specification are valid from 5% to 100% of amplitude range; 400mV is only confined to manual range; AC conversion average value: Measuring impedance: 10MOhm(nominal), <100pF, Common mode rejection ratio: 50Hz or 60Hz>100dB Overvoltage protection: 600V p-p
4.000V	0.001V	0.5% + 4	
40.00V	0.01V	0.5% + 4	
400.0V	0.1V	0.5% + 4	
DC Current Measurement			
40.00mA	0.01mA	0.2% + 4	Over Load Protection: 0.5Amp/250V fast-blow fuse Measuring Impedance: 1 Ohm
400.0mA	0.1mA	0.2% + 4	
AC Current Measurement			
40.00mA	0.01mA	0.5% + 4	Spec. are valid from 5% to 100% of amplitude range Measuring impedance: 1 Ohms Over Load protection: 0.5Amp, 250V fast- blow fuse
400.0mA	0.1mA	0.5% + 4	

Appearance

General Specification

Power Supply: 6V batteries (4*1.5V alkaline AAA batteries or 4*1.5V Ni-MH AAA batteries)
Maximum Voltage: 600Vp-p (Maximum Voltage between all input jacks & earth ground)
30VDC (Maximum Voltage between all output jacks & earth ground)
Operating Temperature: 5C. to 50C.
Operating relative Humidity: <80% RH
Storage Temperature: -10C. to 55C.
Storage Humidity: < 90% RH
Size: 205*95*42mm (plus protector)
Accessories: a copy of user manual, a set of industrial test lead (with alligator) clips and two 63mA/250V fast-blow fuses
Option: Adaptor
Safety: Compiled with IEC61010 (Safety standard issued by International Electro-technical commission

Sailent Feature

Direct TC & RTD output
DC current .001mA resolution
Back Light LCD
Relative Range Selection 25% to 100%
Loop Power
Direct Caliberation possible (Refer pg 51 to 57)
Automatic Power on/off function

Range	Resolution	Accuracy, ± (% of Reading+Counts)	
Resistance Measurement			
400.0Ohms	0.1 Ohms	0.2% + 4	Open Cicuit voltage:0.4V; Guide lead resistance is excluded in the accuracy Over Voltage protection: 600V p-p
4.000KOhms	0.001KOhms	0.2% + 4	
40.00KOhms	0.01KOhms	0.2% + 4	
400.0KOhms	0.1KOhms	0.2% + 4	
4.000MOhms	0.001MOhms	0.5% + 4	
40.00MOhms	0.01MOhms	1.0% + 4	
RTD Measurement			
Pt100	-200~700C.	1C.Resolution .5%+2 Acc.	By using Pt100-385 temperature scale Measuring Current 1mA Note Attached Lead Resistance is excluded
Cu50	-50~150C.	1C.Resolution .5%+4 Acc.	
TC Measurement			
R	-40 to 1760C.	0.5% + 3(<100C.) 0.5% + 2(>100C.)	Resolution 1C By using ITS-90 temperature scale Note The accuracy does not include the error of internal temperature compensation caused by a sensor. The range of internal temperature compensation sensor is ± 2C.
S	-20 to 1760C.		
B	400 to 1800C.	0.5% + 3(<600C.) 0.5% + 2(>600C.)	
E	-200 to 500C.	0.5% + 2(<100C.) 0.5% + 1(>100C.)	
K	-200 to 950C.		
J	-200 to 700C.		
T	-200 to 400C.		
N	-200 to 1000C.		
Frequency Count			
50.00Hz	0.01Hz	0.1% + 3	Display Update 3 times/second (>10Hz)
500.0Hz	0.1Hz	0.1% + 3	
5.000KHz	1Hz	0.1% + 3	
50.00KHz	0.01KHz	0.1% + 3	
100.0Hz	0.1KHz	0.1% + 3	
Diode Test & Continuity Test			
Diode Test Indication - Displays voltage drop across device, Open Circuit voltage: 1.1V-1.6V Current:<0.2mA (Typical Value) Accuracy + (2% reading + 1 Count)			
Continuity Test Indication			
continuous Audible tone for test Resistance<50 Ohms			
Open circuit voltage: <0.45			
Short Circuit current: 130 microA typical			
Overload protection: 600V peak			

Marketed By

Temp | Humidity | Pressure | Differential Pressure | Vacuum | Gases | Particle | Air Flow
Moisture | Dissolved Oxygen | Radiation | Air Quality | Light / Lux | Distance | Vibration

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