ALIACA
Multi-Function Calibrator
Model ACA50 Series

GENERAL

ALIACA ACA50 signal calibrator can measure and output multiple signals including voltage, current, TC and thermal resistance. The adoption of high definition LCD screen and silicone keypad is convenient for operating. With long standby time, high precision and programmable output function. It's widely used in lab, PLC in industry site, process instrument, electronic valve and many other areas's debugging.

FEATURES

- ❑ Sources and reads mA, mV, V, Ohms, RTD and TC
- ❑ Keypad to enter output parameters directly
- ❑ Concurrent input/output, convenient to operate
- ❑ Sub display of sources and reads (mA,mV,V)
- ❑ Large 2-line LCD with backlight display
- ❑ 24VDC loop power supply
- ❑ Thermocouple measurement/output with automatic or manual cold junction compensation
- ❑ Corresponds to various types of source pattern (Step sweep/ Linear sweep/ Manual step)
- ❑ lithium battery available, continuous use for at least 5 hours

STANDARD SPECIFICATION

- Source
  - ACA50N : VDC, mA, mV
    T/C(S, K, E, T, J, B, R, N)
    24VDC, 25mA Max.
  - ACA50S : VDC, mA, mV
    T/C(S, K, E, T, J, B, R, N)
    RTD (PT100)
    Resistance, 15Ω - 400Ω
    24VDC, 25mA Max.
- Read
  - ACA50N : VDC, mA, mV
    T/C(S, K, E, T, J, B, R, N)
  - ACA50S : VDC, mA, mV
    T/C(S, K, E, T, J, B, R, N)
    RTD (PT100)
    Resistance, 0Ω - 400Ω
- Operating Temp. : -10 ~ +50 °C
- Ambient Humidity : 20 - 80% RH non-condensing
- Programable Output : Settng Value / Time max. 4 segments
  Max. 40 segments from Min - Max - Min
  Cycle Time : 999Time Maximam

- Display : 2.5" (4*39 Pixels), Backlight LCD
- Display Update Rate : 3 / second
- Response Time : 80ms
- Keyboard : 20 silicone keyboard
- Battery Type : lithium battery, 3500 mAH, 3.8VDC
- Battery Operation : 5-10 Hours
- Charge Time : 5-6 Hours (5V/1A)
- Power Consumption : 1.2W
- Overvoltage Protection : Max 30VDC
- +/-Reverse Protection : Max 30VDC
- Enclosure : IP54
- Dimension
  - Calibrator : 115 *70 * 26mm
    4.53" * 2.76" * 1.02"
  - Carrying Case : 135*96*60mm
    5.31" * 3.78" * 2.36"
- Accessory Included : Carrying case
  : Test leads（Black*1,Yellow*1,Red*1）
  : USB recharger cable
- Weight : 0.3 Kg

CE

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TECHNICAL SPECIFICATION

Source / Measurement					
Function	**Range**	**Load**	**Impedance**	**Resolution**	**Accuracy**
DCV(1	0~15.00 V	Min 500 Ω	1.2MΩ	0.01V	±0.2%FS
DCmA	0~24.00mA	Max 750 Ω	100Ω	0.01mA	±0.2%FS
	4.00~20.00 mA	Max 750 Ω	100Ω	0.01mA	±0.2%FS
DCmV	0~24.00mV	Min 300 Ω	1.2MΩ	0.01mV	±0.2%FS
	0~100.0 mV	Min 300 Ω	1.2MΩ	0.1mV	±0.2%FS
R(2	0~400.0Ω	**	**	0.1Ω	±0.2%FS
RTD(PT100）	0~650.0°C	**	**	0.1 °C	±0.2%FS
TC	K、T、E、J	**	1.2MΩ	1 °C	±1.0%FS
	N、R、S、B	**	1.2MΩ	1 °C	±1.0%FS
Buit-in 24VDC	24VDC	Max 24mA		**	**

1)DCV: The measurable range is 0~30.00V when in measurement.

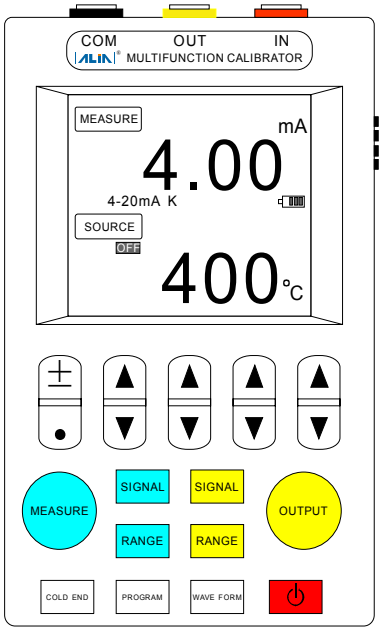
2)R: The range is 15~400.0Ω when in output, it's used to simulate the corresponding resistance of RTD only.

TC / RTD Measurement and Source					
Sensor Type		**Display(°C)**	**mV / R**	**Measurement**	**Simulation**
				1Year Uncertainty(3	**1Year Uncertainty(3**
K	NiCr-Ni	0~1372	0.000~54.874	±0.35 °C	±0.35 °C
E	NICr-Con	0~1000	0.000~76.354	±0.25 °C	±0.25 °C
J	Fe-Con	0~1200	0.000~69.535	±0.3 °C	±0.3 °C
T	Cu-Con	0~400	0-20.872mV	±0.25 °C	±0.25 °C
R	Pt13Rh-Pt	0~1768	0-21.101mV	±0.8 °C	±0.8 °C
B	Pt30Rh-Pt6Rh	0~1820	0.000~13.814	±1.5 °C	±1.5 °C
S	Pt10Rh-Pt	0~1768	0.000~18.696	±0.85 °C	±0.85 °C
N	NiCrSi-NiSi	0~1300	0.000~47.513	±0.4 °C	±0.4 °C
RTD	PT100	0~650.0	100.00-329.64Ω	0.2 °C	0.25 °C

TC Measurement and Source Reference Junction	
Range(°C)	**1Year Uncertainty(3**
-10~50 °C	±0.28°C

5): Uncertainty include reference uncertainty , hysteresis , non-linearity , repeatability and typical long-term stability for the mentioned period .

TECHNICAL SPECIFICATION



Support efficient operation with various types of source pattern