

## Yokogawa Calibrators

### CA11E Voltage/Current Calibrator

- Source and Measure Voltage and Current
- 4-20mA and 1-5V DC Step-up/down Function
- 20mA SINK Function
- Sweep Function
- 0.05% Basic Accuracy



#### SPECIFICATIONS

##### Source/Measure Functions

Range	Span
30V	0 to 30.00V DC
10V	0 to 11.000V DC
1-5V (source only)	1/2/3/4/5V DC
1V	0 to 1.1000V DC
100mV	0 to 110.00mV DC
20mA	0 to 24.000mA DC
4-20mA (source only)	4/8/12/16/20mA
20mA SINK (source only)	0.1 to 24.000mA

### CA71/SP1 Multi-function Calibrator

- Simultaneous Source & Measure Capability
- Separate Source & Measure Switches for Easy Setup
- Autostep, Sweep & Memory Functions
- 0.025% Measure Accuracy (DCV)



Each CA71/SP1 includes: 120VAC adapter, source & measure cables, terminal adaptor for temperature measurements, input fuse, magnetic instrument case, accessory case for input cables, carrying case, 9 pin RS232 communications cable & data logging software.

#### SPECIFICATIONS

SOURCE FUNCTIONS	RANGES	BEST RESOLUTION	BEST ACCURACY
DCV	100mV/1V/10V/30V	10mV	0.02%+15µV
DCA	20mA/4-20mA	1µA	0.025%+3µA
mA sink	20mA	1µA	0.05%+3µA
Resistance	400Ω	0.01Ω	0.02%+0.1Ω
RTD	Pt100 (-200 to +850°C)	0.1°C	0.025%+0.3°C
TC	J K T E L U N	0.1°C	0.02%+0.5°C
TC	R S B	1°C	0.02%+1.5°C
Frequency	500/1000/10kHz	0.2Hz	0.2Hz
Pulse	99999 cycles	1	--

  

MEASURE FUNCTIONS	RANGES	BEST RESOLUTION	BEST ACCURACY
DCV	100mV/1V/10V/100V	10mV	0.025%+20µV
DCA	20mA/4-20mA	1mA	0.025%+4µA
Resistance	400Ω	0.01Ω	0.05%+0.1Ω
ACV	1/10/100/300V	1mV	0.5%+5 digits
RTD	Pt100 (-200 to +850°C)	0.1°C	0.05%+0.6°C
TC	J K T E L U N	0.1°C	0.05%+1.5°C
TC	R S B	1°C	0.05%+2°C
Frequency	100/1000/10kHz	0.01Hz	2 digits
Pulse	99999 counts/min, /hr	1	--

### CA12E Temperature Calibrator

- Simulate Thermocouples and RTDs
- Multi-range RTD Thermometer
- °C/°F Selection
- Built-in Sensor for Reference Junction Compensation
- 0.05% Basic Accuracy
- Binding Post Terminal Adapter



#### SPECIFICATIONS

##### Source/Measurement Functions

Selection	Source/Measure
Type K	-200.0 to 1372.0°C -328 to 2498°F
Type E	-200.0 to 1000.0°C -328 to 1832°F
Type J	-200.0 to 1200.0°C -328 to 2192°F
Type T	-200.0 to 400.0°C -328 to 752°F
Type N	-200.0 to 1300.0°C -328 to 2372°F
Type R, Type S	0 to 1768°C 32 to 3214°F
Type B	600 to 1800°C 1112 to 3272°F
Type L	-200 to 900°C -328 to 1652°F
Type U	-200 to 400°C -328 to 752°F
RTD Pt100 (3 wire)	-200.0 to 850.0°C -328 to 1562°F
100mV	-10.00 to 110.00mV
400Ω	0 to 400.0Ω

### CA150/SP1 Multi-function Calibrator

- Simultaneous Source & Measure Capability
- Large LCD Display
- Step, Linear & Programmed Sweeps
- Loop Power Supply
- DC Voltage and Current Generation
- Settings and Data Memory
- 0.02% Measure Accuracy (DCV)



Each CA150/SP1 includes: 120VAC adapter, source & measure cables, terminal adaptor for temperature measurements, input fuse, NiMH battery, accessory case for input cables & carrying case

#### SPECIFICATIONS

SOURCE FUNCTIONS	RANGES	BEST RESOLUTION	BEST ACCURACY
DCV	100mV/1V/10V/30V	1µV	0.02%+10µV
DCA	20mA	1µA	0.02%+3µA
mA sink	20mA	1µA	0.025%+6µA
Resistance	500/5k/50kΩ	0.01Ω	0.02%+1.5Ω
RTD	Pt100 (-200 to +850°C)	0.1°C	0.025%+0.3°C
TC	J K T E L U N	0.1°C	0.02%+0.4°C
TC	R S B	1°C	0.02%+1.2°C
Frequency	100/1000/10k/50kHz	0.01Hz	0.05Hz
Pulse	1100 CPM	0.1 CPM	0.5 CPM

  

MEASURE FUNCTIONS	RANGES	BEST RESOLUTION	BEST ACCURACY
DCV	500mV/5V/35V	10µV	0.02%+50µV
DCA	20mA/100mA	1µA	0.025%+4µA
Resistance	500/5k/50kΩ	0.01Ω	0.055%+0.075Ω
RTD	Pt100 (-200 to +850°C)	0.1°C	0.05%+0.6°C
TC	J K T E L U N	0.1°C	0.05%+1.5°C
TC	R S B	1°C	0.05%+2°C
Frequency	100/1000/10kHz	0.01Hz	2 digits
Pulse	100000 CPM, CPH	1	--