EN: This Datasheet/Document is presented by the manufacturer.

Please visit our website for pricing and availability at www.hestore.hu.

Data Sheet

11,000-Count Dual-Display Handheld Capacitance Meters

830C and 890C



Features & Benefits

- 11,000-count resolution on primary display
- Bright LCD backlight
- 0.5% basic accuracy
- Fast auto range design for rapid, easy component measurements
- Relative mode
- Visible and audible tolerance mode: 1%, 5%, 10%, 20%
- Data Hold and Min/Max/Average recording
- USB (Virtual COM) interface
- SCPI compliant commands for remote communication
- Software for data logging and front panel emulation available as free download
- Selectable auto-power-off options and configurable power-up state
- 3-year warranty

Full-Featured Handheld Capacitance Meters

B&K Precision's 830C and 890C 11,000-count handheld capacitance meters measure capacitance up to 200 mF. Straightforward to operate, these instruments can make measurements quickly and simplify the capacitance sorting process.

Unlike other handheld instruments such as LCR meters that make measurements using an AC signal with a specific test frequency, the 830C and 890C measure capacitance by applying a constant current that briefly charges, then discharges the connected capacitor.

The meters include many handy functions. The compare mode which supports 25 sets of High /Low limits, provides a convenient means to sort capacitors without needing to set up the meter each time. Data logging, Hold/Min/Max Average recording, tolerance, and relative mode features offer additional component troubleshooting tools.

Flexible Operation

A tilt stand provides position flexibility for viewing and operating the meter. The over-molding rubber case protects the meter for better durability. A single 9V battery or an AC power adapter (included with model 830C) can be used to power the meter, giving the user options for portable or benchtop use.

Applications

- Capacitive component troubleshooting
- Electronic assembly
- Component sorting
- Quality control

Model	830C	890C
Max. Range	199.99 mF	50.00 mF

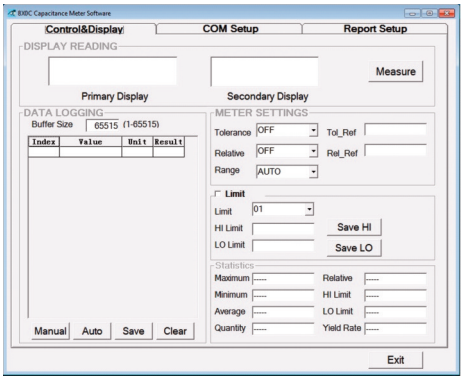
Technical data subject to change
© B&K Precision Corp. 2011

BK PRECISION
ELECTRONIC TEST INSTRUMENTS

▲ Flexible Configuration

Increase Productivity with PC Connectivity

Software for your handheld capacitance meter is available for download. The application software's virtual panel lets you easily configure, view, and log your measurement results.



Dual Display

The 830C and 890C's dual display allows multiple measurements to be conveniently displayed at once.

Versatile Operation Modes

To maximize convenience and functionality, these meters support the following modes: tolerance sorting mode, relative mode, data hold, manual and auto range mode, Min/Max/Avg recording, and Hi/Lo limit setting.

▲ Easy Front Panel Operation



Specifications

Electrical specifications

Accuracy is given as (% of reading + counts of least significant digit) at 23°C ± 5°C, with relative humidity less than 80%.

Capacitance

Range	Resolution	Accuracy*	Measuring rate as full scale (approx.)
1000 pF	0.1 pF	1% + 10	5 times /sec
10 nF	0.001 nF	1% + 5	5 times /sec
100 nF	0.01 nF	0.5% + 3	5 times /sec
1000 nF	0.1 nF		5 times /sec
10 µF	0.001 µF		5 times /sec
100 µF	0.01 µF		5 times /sec
1000 µF	0.1 µF		0.86 times /sec
10 mF	0.001 mF	1% + 5	0.13 times /sec
50 mF (890C)	0.01 mF	2% + 5	0.026 times /sec
199.99 mF (830C)			0.006 times /sec

* The accuracy is specified to measure film capacitor or better, and use relative mode to zero residual first.

General

Model	830C & 890C
Display	41/2-digit liquid crystal display (LCD) with maximum reading of 11000 counts automatic polarity indication
Measuring rate (approx.)	5 times /sec for capacitance <100°F
Low battery indicator	"⊟" appears when the battery voltage drops below 6V (approx.)
Operating temperature	Full accuracy at 0°C to 40°C (32°F~113°F)
Storage temperature	-20°C to 50°C (-4°F~122°F) without battery
Operating humidity (R.H.)	Maximum 80% R.H. for temperature up to 31°C decreasing linearly to 50% R.H. at 40°C
Temperature coefficient	0.1 x (specified accuracy) / °C (from 0°C to 18°C or 28°C to 40°C)
Power requirements	Single standard 9V battery or AC power adapter*
Power consumption	6.5 mA for battery operation, 2 uA standby current (power is off)
Battery life	70 hours without backlight (approx.) (Based on new alkaline 9V battery)
Dimension (H x W x L)	7.5 x 3.5 x 1.6 inches (190 x 90 x 41 mm)
Weight	0.77 lbs. (350 g) with battery
Safety and EMC compliance	IEC 61010-1:2001 pollution degree 2, IEC 61326-2-1:2005
	Three Year Warranty
Standard Accessories	Alligator clip leads, 9V battery, mini USB cable, instruction manual, AC adapter* (830C only)
Optional Accessories	BE800 120 VAC Wall Adapter, BE802 230 VAC European Two Prong Wall Adapter

* The 830C includes a 120 V AC adapter. For a 230 V AC adapter, order model 830C EXD. The AC adapters are optional accessories for the 890C.

Specifications are subject to change without notice.
For current up-to-date product information, please visit www.bkprecision.com.