

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# Capacitance Meters

### Specifications models

	870	830	8100
CAPACITANCE			
RANGE	500pF (0.1pF)	10 automatically	200pF (0.1pF)
(Best Resolution)	5nF (IpF)	selected ranges	2nF (1pF)
	50nF (10pF)	199.9pF to 19.99μF	20nF (10pF)
	500nF (0.1nF)	(0.1pF on lowest range,	200nF (100pF)
	5μF (InF)	otherwise 0.05% of FS)	2μF (InF)
	50μF (10nF)	20µF to 199.9mF	20μF (10nF)
	500μF (0.1μF)	(0.05% of full scale)	200μF (100nF)
	5000μF (IμF)		2000μF (IμF)
	50mF (10µF)		20mF (10μF)
ACCURACY	±(1%rdg + 10dgt)	±(0.2%rdg + 1 dgt + 0.5pF)	±(0.5% rdg + 1 dgt + 0.5pF)
	$\pm$ (1%rdg + 3dgt)	±(1%rdg + 2dgt)	±(0.5% rdg + 1 dgt)
	$\pm$ (1%rdg + 3dgt)		±(0.5% rdg + 1 dgt)
	$\pm$ (1%rdg + 3dgt)		±(0.5% rdg + 1 dgt)
	$\pm$ (1%rdg + 3dgt)		±(0.5% rdg + l dgt)
	$\pm$ (1%rdg + 3dgt)		±(0.5% rdg + 1 dgt)
	$\pm (2\%rdg + 3dgt)*$		$\pm (0.5\% \text{ rdg} + 1 \text{ dgt})$
	±(2%rdg + 3dgt)*		±(2% rdg + 1 dgt)
	±(2%rdg + 3dgt)*		±(4% rdg + 1 dgt)

POWER SOURCE			
	9V Battery	4 C Batteries	9V Battery
BATTERY LIFE	200 hours typ. (alkaline)	20 hours typ. (alkaline)	200 hours typ. (alkaline)
DISPLAY	4 digit LCD (dual)	3 1/2 digit LCD	3 1/2 digit LCD
DIGIT HEIGHT	0.5/0.3" (13/7.6mm)	0.5" (13mm)	0.56" (14mm)
OPERATING			
TEMPERATURE	32° to 122°F	32° to 122°F**	32° to 104°F
	(0° to 50°C)	(0° to 50°C)**	(0° to 40°C)
STORAGE			
TEMPERATURE	-4° to 140°F	-1° to 125°F	14° to 140°F, <70% RH
	(-20° to 60°C)	(-18° to 52°C)	(-10° to 60°C)
DIMENSIONS	7.56 x 3.54 x 1.46"	6.4 x 4.4 x 2.4"	6.75 x 3.0 x 2.25"
(L x W x D)	(192 x 90 x 37 mm)	(160 x 110 x 60 mm)	(171 x 76 x 57 mm)
WEIGHT	17.64 oz. (500g)	1.6 lbs. (725g)	11.3 oz. (200g)

Three Year Warranty

One Year Warranty

# Accessories

	SUPPLIED:	Test Leads, Manual,	Manual	Test Leads, Manual,
		Battery		Battery
	OPTIONAL:	TL-8 SMD Probe	TL-8 SMD Probe	TL-8 SMD Probe
		AK-890 RS-232 Pkg.	BC-28 AC adapter/Charger	
			BP-28 Battery Pack	
	CARRYING CASE: LC-29B		LC-28A	LC-29B
(Not included)				
* >2mE NO Spec. ** 59° to 95°F (		pec. ** 59° to 95°F	(15° to 35°C) for specified accu	uracy

# **Additional Specifications**

	model
	810C
EXCITATION VOLTAGE	< 3.5 V Max.(approximate)
ZERO ADJUSTMENT RANGE	+20 pF typical
PROTECTION	Input protected by 0.1 A/ 250 V Fast Acting.
MEASUREMENT RATE	2 per second, nominal.

Additional Specifications model		
	830	
HOLD ACCURACY	all specs between 180 & 1999 counts same as Auto: for all readings between 0	
	and 179 counts add: 0.1% for full scale to 19.99 mF; 0.5% of full scale from	
	19.99 mF to 199.9 mF.	
READING TIME	0.4-1.0 sec to 20 mF; increasing to 6 sec at 200 mF.	
ZERO CONTROL	Can compensate up to 25 pF of test lead capacitance.	
OVERRANGE		
INDICATOR	Plus (+) sign with blank display and mF indicates on.	
POWER SOURCE	4 "C" size cells, nicad, alkaline, or zinc carbon, with provision for AC	
	adapter/charger. (Note: batteries and charger are not supplied.)	

# Model 810C

## Capacitance Meter

The Model 810C Capacitance Meter is a compact capacitance meter, designed for accurate measurement of capacitive components. It features direct plug-in test sockets and test lead jacks. A zero adjustment knob is also provided to "zero" test lead capacitance.



810C

- ■Zero adjustment knob
- Capacitor test sockets
- ■Fuse protected
- ■Protective rubber boot

# Model 830

# **Capacitance Meter**

The Model 830 Capacitance Meter is a highly accurate capacitance meter It is fully autoranging and can be



powered from a choice of alkaline or NiMH betteries or from AC/DC adapter/charger (sold separately). A selectable range hold feature provides for fast batch testing of large value capacitors.

■Auto ranging

■ Selectable range hold feature

■Zero adjustment knob

■ Capaciter test socket and test lead jacks

# Model 890

The Model 890 Capacitance Meter features a large LCD with dual display, 5,000 counts resolution, and 10 automatically selected ranges with full scale value from 0.1pF to 50mF. Designed to meet the latest international safety standards, the meter's dedicated chip and microprocessor allow programmable high/low limits or pre-programmed standard capacitor



tolerances, making it ideal for measuring values, inspection, sorting capacitors and testing capacitors against standard tolerances. Optional software and cabling is available for PC based data logging and monitoring. The 890 is a unique value and is indispensible on the inspection bench.

- Dual display simultaneously displays value and deviation from selected tolerance
- ■Sort on preset tolerance of ■RS-232 interface for 1, 5, 10%
- ■Program unique values to sort for specific circuit applications
  - data logging software available

