



## L/C/R METER MZ-805

The precision bridge **MZ-805** offers to the user the possibility of obtaining a high performance equipment by a reasonable price. There are in the market a large number of precision meters, but most of these instruments are portable and offer a limited performance. In general, the instruments that join a bigger profile, usually are desktop instruments and they have a very expensive cost.

The user with the **MZ-805** finds a perfect balance between both cases, the portable instruments and the fixed ones, joining benefits very elevated and their cost do not move away of the one of the portable meters.

The precision bridge **MZ-805** is the system more adapted to obtain fast and accurate measurements of inductance, capacity, resistance and D/Q factors on components, being reached an accuracy of 0.1%. The maximum and minimum values are simultaneously visualised.

The **MZ-805** incorporates a microprocessor that allows a full automatic control for mode selection and measurement ranging on a large number of components.

The **MZ-805** is specially indicated for production processes, research laboratories and equipment pattern for teaching centres.



SPECIFICATIONS		MZ-805		
<b>Functions</b>		R, L, C, D and Q.		
Parameters measured		Series or parallel equivalent circuit		
Measurement modes		Fully autoranging including selection between L, C and R		
Measurement functions		The Zero C function nulls out up to 100pF of stray capacitance in the test fixture		
Measurement frequency		User selectable to be 100Hz, 1kHz or 10kHz; frequency accuracy $\pm 0.01\%$ 120Hz instead of 100Hz by factory option for 60Hz operation		
Measurement Ranges and Resolution		Parameter	Range	
		R	0.1 m $\Omega$ -990 M $\Omega$	
		L	0.001 $\mu$ H-9900 H	
		C	0.001 pF-99000 $\mu$ F	
		D	0.001-999	
		Q	0.001-999	
<b>Measurement Accuracy</b>		<b>100/120 Hz</b>	<b>1 kHz</b>	<b>10 kHz</b>
<b>R (Q&lt;0,1)</b>				
0.1% $\pm 1$ digit		2 $\Omega$ - 1 M $\Omega$	2 $\Omega$ - 500 k $\Omega$	2 $\Omega$ - 50 k $\Omega$
0.5% $\pm 1$ digit		0.4 $\Omega$ - 5 M $\Omega$	0.4 $\Omega$ - 2 M $\Omega$	0.4 $\Omega$ - 200 k $\Omega$
2% $\pm 1$ digit		0.1 $\Omega$ - 20 M $\Omega$	0.1 $\Omega$ - 10 M $\Omega$	0.1 $\Omega$ - 500 k $\Omega$
<b>L (Q&gt;10)</b>				
0.1% $\pm 1$ digit		4 mH - 500 H	400 $\mu$ H - 50 H	40 $\mu$ H - 5 H
0.5% $\pm 1$ digit		800 $\mu$ H - 2500 H	80 $\mu$ H - 250 H	8 $\mu$ H - 25 H
2% $\pm 1$ digit		200 $\mu$ H - 9900 H	20 $\mu$ H - 1000 H	2 $\mu$ H - 100H
<b>C(D&lt;0,1)</b>				
0.1% $\pm 1$ digit		10 nF - 1000 $\mu$ F	1 nF - 100 $\mu$ F	100 pF - 10 $\mu$ F
0.5% $\pm 1$ digit		2 nF - 5000 $\mu$ F	200 pF - 500 $\mu$ F	20 pF - 50 $\mu$ F
2% $\pm 1$ digit		500 pF - 20000 $\mu$ F	50 pF - 2000 $\mu$ F	5 pF - 200 $\mu$ F
<b>Q &amp; D</b>				
0.25% $\pm 1$ digit		0.25 - 4,0 For C=40 nF-100 $\mu$ F or L= 10 mH-50 H	0.25 - 4,0 For C=10 nF-10 $\mu$ F o L= 1 mH-2.5 H	0.25 - 4.0 For C=1 nF - 1 $\mu$ F o L= 100 $\mu$ H-250 mH
		Capacitance accuracies apply after null		
<b>Measurement Update Rate</b>		2.5 readings per second		

## SPECIFICATIONS

## MZ-805

<b>Limits Comparator (Sort Mode)</b> Type	Comparison with multiple limits set up from the keyboard or PC via RS232 interface
	Binning
<b>Display</b> Display Type	Dual 5-digit 0.56" LEDs with range and function indication Maximum display count 50,000
	Display Functions
<b>Inputs</b> Component Connection Maximum Voltage on Component Bias Voltage Input Protection	4-terminal connection for both radial and axial devices
	0.3 V rms
	Switchable 2V polarising voltage for measuring electrolytic capacitors
	The instrument has been designed to withstand direct connection of capacitors charged up to 50V DC with up to 1 Joule (½ CV 2) of stored energy
<b>Interfaces</b> RS-232C	Serial link to PC permitting range/function control, limits setting and results data-logging on the PC
<b>General</b> Keyboard Non-Volatile Memory	Full numeric keyboard for entry of limits data Up to 9 complete set ups stored in non-volatile memory
<b>Alimentation</b>	220V-240V AC or 110V-120V AC ±10% 50/60Hz, adjustable internally; 25VA max. Installation Category II
<b>Operating Range</b>	+5°C to 40°C, 20-80% RH
<b>Storage Range</b>	-40° C to 70° C
<b>Environmental</b>	Indoor use at altitudes up to 2000m Pollution Degree 2
<b>Safety</b>	Complies with EN61010-1
<b>EMC</b>	Complies with EN61326
<b>Mechanical features</b> Size Weight	365 x 240 x 95 mm, including feet
	2.9 kg
<b>Included accessories</b>	Axial components adapter Mains cord
<b>Options</b>	AD - 805 4-terminal BNC adapter AD - 806 4-terminal surface mount tweezers CC - 705 Kelvin Clip set RM - 805 PC logging software