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		
Functions			
Parameters measured	R, L, C, D and Q.		
Measurement modes	Series or parallel equivalent circuit		
Measurement functions	Fully autoranging including selection between L, C and R 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 ± 0.01% 120Hz instead of 100Hz by factory option for 60Hz operation		
Measurement Ranges and Resolution	Parameter	Range	
	R	0.1 mΩ-990 MΩ	
	L	0.001 µH-9900 H	
	C	0.001 pF-99000 µF	
	D	0.001-999	
	Q	0.001-999	
Measurement Accuracy	**100/120 Hz**	**1 kHz**	**10 kHz**
R (Q<0,1)			
0.1% ± 1 digit	2 Ω - 1 MΩ	2 Ω - 500 kΩ	2 Ω - 50 kΩ
0.5% ± 1 digit	0.4 Ω - 5 MΩ	0.4 Ω - 2 MΩ	0.4 Ω - 200 kΩ
2% ± 1 digit	0.1 Ω - 20 MΩ	0.1 Ω - 10 MΩ	0.1 Ω - 500 kΩ
L (Q>10)			
0.1% ± 1 digit	4 mH - 500 H	400 µH - 50 H	40 µH - 5 H
0.5% ± 1 digit	800 µH - 2500 H	80 µH - 250 H	8 µH - 25 H
2% ± 1 digit	200 µH - 9900 H	20 µH -1000 H	2µH - 100H
C(D<0,1)			
0.1% ± 1 digit	10 nF - 1000 µF	1 nF - 100 µF	100 pF - 10 µF
0.5% ± 1 digit	2 nF - 5000 µF	200 pF -500 µF	20 pF - 50 µF
2% ± 1 digit	500 pF-20000 µ F	50 pF - 2000 µF	5 pF - 200 µF
Q & D			
0.25% ± 1 digit	0.25 - 4,0 For C=40 nF-100 µF or L= 10 mH-50 H	0.25 - 4,0 For C=10 nF-10 µF or L= 1 mH-2.5 H	0.25 - 4.0 For C=1 nF - 1 µF or L= 100 µH-250 mH
	Capacitance accuracies apply after null		
Measurement Update	Rate 2.5 readings per second		

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L/C/R METER

SPECIFICATIONS

MZ-805

Limits Comparator (Sort Mode)	
Type	Comparison with multiple limits set up from the keyboard or PC via RS232 interface
Binning	Up to 8 PASS bins for the major parameter, plus minor parameter FAIL and general FAIL bins
Display	
Display Type	Dual 5-digit 0.56" LEDs with range and function indication Maximum display count 50,000
Display Functions	Simultaneous display of R+Q, L+Q, C+D, or C+R in normal measurement modes Prompts to change frequency or mode to improve accuracy Simultaneous display of Pass/Fail status with Bin No. in Sort mode
Inputs	
Component Connection	4-terminal connection for both radial and axial devices
Maximum Voltage on Component	0.3 V rms
Bias Voltage	Switchable 2V polarising voltage for measuring electrolytic capacitors
Input Protection	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
Interfaces	
RS-232C	Serial link to PC permitting range/function control, limits setting and results data-logging on the PC
General	
Keyboard	Full numeric keyboard for entry of limits data
Non-Volatile Memory	Up to 9 complete set ups stored in non-volatile memory
Alimentation	220V-240V AC or 110V-120V AC ±10% 50/60Hz, adjustable internally; 25VA max. Installation Category II
Safety	Complies with EN61010-1
EMC	Complies with EN61326
Mechanical features	
Size	365 x 240 x 95 mm, including feet
Weight	2.9 kg
Included accessories	Axial components adapter Mains cord
Options	AD - 805 4-terminal BNC adapter AD - 806 4-terminal surface mount tweezers CC - 705 Kelvin Clip set RM - 805 PC logging software

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