

4210

Automatic LCR Meter, IEEE 488 Compatible



- * L, C, R, D and Q — % Deviation, Binning and Auto Component Modes,
- * 0.1% Accuracy,
- * Three Test Frequencies,
- * Binning and Percentage Deviation Facilities — 10 Bins Available,
- * Built in GO/NO GO limits
- * Auto Component Mode,
- * Auto Ranging,
- * Built-in Four Terminal Test Fixture,
- * Built-in Bias,
- * Auto Trim,
- * Auto OR Manual Selection of Series/Parallel,
- * Simple to Use,
- * IEEE Bus Interface Standard.
- * Handler Interface

The 4210 is a microprocessor based instrument with a basic accuracy of 0.1%. It offers three test frequencies, can display minor term D/Q and has built-in capacitor polarisation facilities. Auto Trim and Auto Range capabilities are standard. The Wayne Kerr 4210 will provide fast measurements with guaranteed reliable performance. It features an innovative Auto Component Mode, whereby the instrument itself determines which type of component is installed in the integral test fixture. The unit incorporates, as standard, an interface to IEEE 488, for remote set-up and control.

WAYNE KERR



ACCURACY

Beyond the ranges shown, accuracy degrades linearly (see graphs)

RESISTANCE ($Q < 0.1$)		Cal	Uncal		
100Hz/120Hz	0 - 500k Ω	$\pm 0.1\%$	$\pm 1m\Omega$		
1kHz	0 - 1M Ω	$\pm 0.1\%$	$\pm 1m\Omega$	$\pm 0.5\%$	$\pm 5m\Omega$
10kHz	0 - 1M Ω	$\pm 0.1\%$	$\pm 1m\Omega$	$\pm 0.5\%$	$\pm 5m\Omega$
Resolution	0.1m Ω				
Max Display	990M Ω				
CAPACITANCE ($D < 0.1$)		Cal	Uncal	DISSIPATION (D)	
100Hz/120Hz	0 - 1600 μ F	$\pm 0.1\%$	$\pm 2p$ F	3.2nF - 1600 μ F	$\pm 0.001(1+D^2)$
1kHz	0 - 160 μ F	$\pm 0.1\%$	$\pm 0.1p$ F	160pF - 160 μ F	$\pm 0.001(1+D^2)$
10kHz	0 - 1.6 μ F	$\pm 0.1\%$	$\pm 0.01p$ F	16pF - 1.6 μ F	$\pm 0.001(1+D^2)$
Resolution	0.001pF	0.0001			
Max Display	990mF	9900			
INDUCTANCE ($Q > 10$)		Cal	Uncal	Q FACTOR	
100Hz/120Hz	0 - 800H	$\pm 0.1\%$	$\pm 1\mu$ H	1.6mH - 800H	$\pm 0.1(Q+1/Q)\%$
1kHz	0 - 160H	$\pm 0.1\%$	$\pm 0.1\mu$ H	160 μ H - 160H	$\pm 0.1(Q+1/Q)\%$
10kHz	0 - 1.6H	$\pm 0.1\%$	$\pm 0.01\mu$ H	16 μ H - 1.6H	$\pm 0.1(Q+1/Q)\%$
Resolution	1nH	0.0001			
Max Display	9900H	9900			

OPERATING CONDITIONS

Temperature Range

Storage	-20°C to +60°C	(-4°F to 140°F)
Operation	0°C to 50°C	(32°F to 122°F)
For full accuracy	10°C to 30°C	(50°F to 86°F)

Power Supply 115V $\pm 10\%$, 240V +6% -15%, 50/60Hz

Overall Dimensions 400 x 270 x 150mm (16 x 11 x 6in).

Weight 3.8kg (8.7 lb)

In step with rapidly developing technology the Company is continually improving its products and therefore reserves the right at any time to alter specifications or designs without prior notice.

