

REPLACEMENT GUIDE FOR OLD WAYNE KERR MODEL

	OLD MODEL	REPLACEMENT MODEL
	4210 10kHz AUTOMATIC LCR METER 4225 10kHz AUTOMATIC LCR METER 4250 100kHz AUTOMATIC LCR METER	4310 LCR METER
Available	Made between 1983 and 1996	First made in 2009 and still in production
Basic Accuracy	4210 & 4250: 0.1% 4225: 0.25%	0.1%
Frequency Range	4210 & 4225: 100Hz, 1kHz, 10kHz 4250: 100Hz, 1kHz, 10kHz & 100kHz	20Hz to 100kHz

The recommended replacement for all three models is now the 4310 LCR Meter. The 4310 has many significant improvements compared to the older models:

- Lower minimum frequency (20Hz)
- Many more measurement frequencies (557 steps)
- Extra measurement parameters (Z Y θ B G X)
- Wider AC Drive range (10mV to 1V_{rms})
- Many more AC Drive levels (200 steps)
- Faster measurement speed
- DC resistance as standard
- Larger and easier to read display
- Autoranging AC input voltage

Three additional 4300 models are available when a measurement frequency greater than 100kHz is required:

- 4320 (20Hz to 200kHz)
- 4350 (20Hz to 500kHz)
- 43100 (20Hz to 1MHz)
- The following table contains the key specification features.

Model Number	4210 & 4250	4225	4310
Basic Accuracy	0.1%	0.25%	0.1%
Test frequencies	100Hz 1kHz 10kHz 100kHz (4250)	100Hz 1kHz 10kHz	20Hz to 100kHz 557 steps
Measurement functions	L C R Q D	L C R Q D	L C R Q D Z Y θ B G X
Auto component	Yes	Yes	No
AC Drive Level	250mV	250mV	10mV to 2V 100 μ A to 20mA 200 steps
Source Impedance	100 Ω	100 Ω	100 Ω
Measurement Time	650ms (cal mode) 270ms (uncal mode)	650ms	25ms
DC resistance	No	No	Standard
Connections	4210 & 4250: 4 terminal via integral fixture 4250 only: Also via BNC connectors	4 terminal via integral fixture	4 terminal via BNC Kelvin leads 1EV1006 fixture available for compatibility with 4200 models
DC bias voltage	2V (internal)	2V (internal)	2V (internal) \pm 40V (external)
Binning	Yes	No	/B1 & /B2 option
Display	5 digit LED for results LEDs to indicate component type and measurement units	5 digit LED for results LEDs to indicate component type and measurement units	Black / white 320 x 240 pixels Full setup details shown on display
Interfaces	GPIB (IEEE488-2) RS232 (4250 C option)	No	GPIB (IEEE488-2) RS232 USB & LAN
Power	115/230V AC Switchable	115/230V AC Switchable	90 to 264V AC Autoranging
Mechanical	150mm (H) 270mm (W) 400mm (D) 3.8kg	150mm (H) 270mm (W) 400mm (D) 3.6kg	104mm (H) 322mm (W) 285mm (D) 3kg