200kHz Digital LCR Meter

Protek 9216B

Features

- ▶ Low cost, high performance, Small size
- ▶ 4.3" inch TFT LCD & Dual display
- ▶ Max. 200kHz test frequency
- ▶ Max. 6 Digit reading resolution
- ▶ 10mVrms~2.0Vrms programmable signal level, Built-in 0~±5V50mA bias source
- ▶ DCR, 50mV~ 2V programmable test level, Resolution 10μΩ
- ▶ Ls-Rd / Lp-Rd Function (L, Rd display simultaneously)①
- ▶ Highest test speed 13ms/time
- ▶ Selectable 30Ω/100Ω Signal source impedance
- ▶ V/I monitor and auto level adjustment function
- ▶ Built-in comparator, 10Bins sorting and count function
- ▶ File storage and firmware update through U-disk
- ▶ RS-232C, RS485, USB, HANDLER, GPIB Interface

* Rd means DCR

Brief Introduction

High technology & Quality circuit design and concentrating essence of LCR test, Protek-9216B is a new generation compact LCR meter of low cost and high performance. Also of traditional mechanical power switch, it New Software control power switch. The basic accuracy of 0.05% and good test stability can compare favorably with that high-end model. Being equipped with 4.3" inch TFT LCD Display and brand new interface system, Protek-9216B LCR Meter possess elegant appearance and easy operation. Also, being provided with various interfaces and good compatibility with SCPI commands, Protek-9216B LCR Meter are convenient for constituting all kinds of test system and satisfy various kinds of demands for inspection, and scientific research

Specifications

Model		Protek 9216B
Basic measurement Accuracy (See details In technical specification)	LCRZ	0.05%
	DCR	0.1%
	Calibration condition	Warm up time : ≥30minutes ; Environment temperature : 23±5℃ Signal Level : 1Vrms ; Correction: after OPEN, SHORT Testing cable length : 0m
Test signal Frequency		20Hz ~ 200kHz
Signal source output impedance		Selectable 30Ω, 100Ω, ±1% @1kHz
AC test signal level	Normal	10mV~ 2Vrms
		Resolution : 10mV Accuracy : 10% x Setting voltage+2mV
		100μA~ 20mArms / Resolution : 0.1mA
	Constant level (ALC ON)	20mA~ 1Vrms
		Resolution : 10mV / Accuracy 10%
		200μA~ 10mArms / Resolution : 0.1mA
DCR test signal level		50mV~ 2V DC / Resolution : 0.5mV
DC Bias voltage source		0V~ ±5V
		Resolution : 0.5mV / Accuracy 1%
		0mA~ ±50mA
		Resolution : 0.5μA
Test parameters		|Z|, |Y|, C, L, X, B, R, G, D, Q, θ, DCR
DCR Display range		0.00001 Ω~ 99.9999 MΩ
LCR Parameters display Range		|Z|, R, X 0.00001Ω ~ 99.9999Ω |Y|, G, B 0.00001μs ~ 99.9999s C 0.00001pF ~ 9.99999F L 0.00001μH ~ 99.9999Kh D 0.00001 ~ 9.99999 Q 0.00001 ~ 99999.9 θ(DEG) -179.999° ~ 179.999° θ(RAD) -3.14159 ~ 3.14159Ω Δ% -999.999% ~ 999.999%
Display Digits		6 digits
Measurement time (≥10kHz)		Fast : 75meas/sec(13ms), Medium : 11meas/sec(90ms) ,Slow : 2.7meas/sec(370ms)
Equivalent circuit		Serial, Parallel
Range mode		Auto, Hold
Trigger mode		Internal, Manual, External, Bus
Average time		1-255
Correction		Open, Short, Load
Math operation		Direct reading, ΔABS, Δ%

Trigger delay time setting		0 ~ 60.000s 1ms steps
Step delay time setting		0 ~ 60.000s 1ms steps
List Sweep		- 10 points list sweep - Frequency, AC voltage/current, internal/external bias voltage/current can be swept. - Each sweep point can be sorted separately
Comparator function		10 bins, BIN1-BING9, NG, AUX
		Bin count function
		PASS, FAIL LED Display on front panel
Built-in Storage		Internal 100 LCRZ instrument setting files, 201 times test results
USB Storage		Instrument setting files, measurement result CSV f Iles, printed screen (GIF format)
Interface	Control interface	HANDLER
	Communication interface	USB HOST, RS-232C, RS485(optional),GPIB(optional)
	Storage interface	USB DEVICE (U-Disk storage)
Dimension		235mm(W) * 105mm(H) * 360mm(D)
Net weight		3.6 kg
Standard Accessories		TEST FIXTURE, Power cable, Fuse(1), Manual Certificate Sheet

Optional Accessories

				
RS-485 Module	GPIB Module	Kelvin Clip	Trans Fixture	Test Fixture

Protek by GSInstruments Co.,Ltd
70, Gilpa-ro 71beon-gil, Nam-gu, Incheon 402-854, Korea
Tel : +82-32-870-5567 Fax : +82-32-870-5640 Web : www.gsi-protek.com