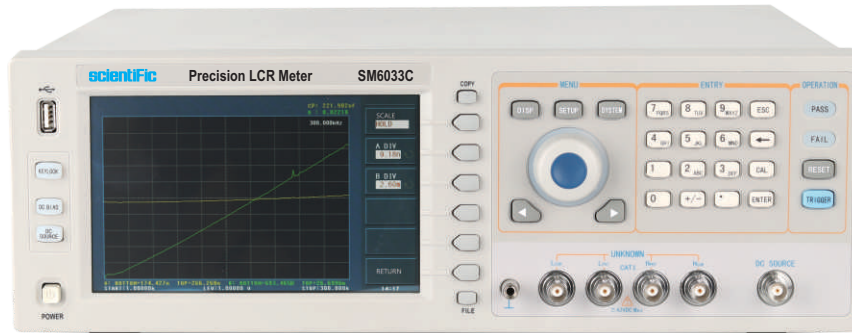


Precision LCR Meter SM6033 Series



Advance Features

- Basic accuracy: 0.05%
- Test signal frequency of 1MHz, resolution of 1mHz, 5-digit frequency
- Signal source selection:
 - 10V/100mA programmable AC test level
 - 10V/100mA programmable DC bias supply
 - 10V/50mA standalone DC voltage source
 - 1A interior DC bias current source (optional)
 - 120A external bias source (optional)
- Maximum test speed: 9ms/time
- Simultaneous display of 4 kinds of test parameters
- 201 -point list sweep function
- Continuous curve scanning/graphical analysis function
- Internal storage of 100 sets of LCRZ setting files and 10 sets of GIF image
- GIF image and CSV data files can be saved to USB storage directly
- HANDLER, USB, LAN, RS232C, GPIB (option), DCI interface

Technical Specifications

Model		SM6033A	SM6033C
Test Signal Frequency		20Hz to 300kHz	20Hz to 1MHz
Frequency Accuracy		0.01%	
Resolution of Frequency		1mHz, 5 digit frequency display	
Test Parameters of LCR		(Z), (Y), C, L, X, B, R, G, D,Q, θ , DCR, Vdc-Idc	
AC Level			
Voltage Range of Test Signal		5mV to 10Vrms	
Resolution of Voltage		100μV, 3 digit display	
Accuracy	ALC ON	10% X set voltage + 2mV	
	ALC OFF	6% X set voltage + 2mV	
Current Range of Test Signal		50μA to 100mA	
Resolution of Current		1μA, 3 digit display	
Accuracy	ALC ON	10% X set current + 20μA	
	ALC OFF	6% X set current + 20μA	
DC Bias Voltage Source	Voltage / Current Range	0V to ±10V / 0mA to ± 100mA	
	Resolution	0.5mV / 5μA	
	Voltage Accuracy	1% X set voltage + 5mV	
	ISO ON	Be used for the bias test of inductance and transformer	
AC Source Impedance	ISO ON	100Ω	
	ISO OFF	30Ω, 50Ω, 100Ω selectable	

Model		SM6033A	SM6033C
DCR Source Impedance		30Ω, 50Ω, 100Ω selectable	
DC Independent Voltage Source	Voltage / Current Range	0V to ±10V / 0mA to ± 50mA	
	Resolution	0.5mV / 5μA	
	Voltage Accuracy	1% X set voltage + 5mV	
	Output Resistance	100Ω	
Test Parameters of LCR		(Z), (Y), C, L, X, B, R, G, D, Q, θ, DCR, Vdc-Idc	
Parameter Display of Test Page		Two sets of main / sub parameter, the second set can be set as ON / OFF 10 pages of list sweep and 15 points per page maximum Multiple parameters continuous sweep graphical analysis	
Basic Accuracy	LCR Test Parameter	0.05%	
	Signal Voltage	0.3Vrms to 1Vrms	
Measurement Time (≥ 10kHz)		Fast : 9ms / time Medium : 9ms / time Slow : 9ms / time (plus the refresh time of display character)	
Display Range of LCR Parameter	(Z), R, X, DCR	0.00001Ω to 99.9999MΩ	
	(Y), G, B	0.00001μs to 99.9999s	
	C	0.00001pF to 9.99999F	
	L	0.00001μH to 99.9999kH	
	D	0.00001 to 9.99999	
	Q	0.00001 to 99999.9	
	θ (DEG)	-179.999° to 179.999°	
	θ (RAD)	-3.15159 to 3.14159	
Δ%		-999.999% to 999.999%	
Equivalent Circuit		Serial, Parallel	
Range Mode		Auto, Manual	
Trigger Mode		Internal, Manual, External, Bus	
Average Times		1 to 256	
Calibration Function		Open, short calibration with full frequency or dot frequency, Load	
Display Reading		Direct reading, Δ ABS, Δ%	
Delay Time Setup		0 to 999, minimum resolution : 100μs	
Comparator		10 bin sorting , BIN1 to BIN9, NG, AUX	
		Bin counter	
		PASS / FAIL on front panel, LED indication	
List sweep		201 points list sweep function, List sweep of frequency, AC Voltage / Current, Internal / External DC bias Voltage / Current and Independent DC source voltage	
Graphical Analysis		Graph scanning and analysis of frequency, AC level and DC bias can be performed. Set the sweep start point, end point and each sweep point. Display the maximum value, minimum value and read any of the chosen sweep point Scanning graphs can be stored into internal or external USB memory	
Internal Nonvolatile Memory		100 sets of LCRZ setting files memory, 201 times test results, 10sets of GIF image, CSV data files	
External USB Memory		GIF image, CSV data files LCRZ setting files memory Test data can be stored via USB memory directly	

Model	SM6033A	SM6033C
Interface	USB, RS232C, LAN, USB HOST (Front panel), HANDLER, GPIB (Optional) 1A, DC bias current source (optional)	
General specifications		
Display	800 x RGB X 480 - 7inch TFT LCD display	
Input Supply	230V $\pm$ 10%, 47Hz to 63Hz	
Power Consumption	Max. 80VA	
Operating Condition	0°C to 40°C, $\leq$ 90%RH	
Dimensions	W : 400 x H : 132 x D : 385 mm	
Weight	Approx 13kg.	
Accessories	Standard : Mains Cord, Gold plated short circuit plate, 4 Terminal Kelvin Test leads, 4 Terminal Test Fixture	

Subject to change

scientific

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