

Impedance Analyzer SM6041 Series



Features

- Test frequency: 10Hz ~ 130MHz
- High precision: using automatic balance bridge technology, Four-terminal pair test configuration
- High stability and consistency
- High speed : the fastest test speed up to 5ms
- High resolution : 10.1-inch capacitive touch screen, resolution 1280*800
- Three test methods : point test, list scan, and graph scan
- 1601 point multi-parameter list scanning function
- Four-parameter measurement
- 4-Channel graphic scanning function, each channel can display
- 4 curves, 16 kinds of split-screen display modes for channels and curves
- Powerful sorting: 10 grades sorting in LCR mode
- Graphic scanning mode, each curve is sorted individually
- High compatibility: Support SCPI instruction set, compatible with KEYSIGHT E4990A, E4980A, E4980AL, HP4284A

Models		SM6041A	SM6041B	SM6041C	SM6041D
AC Parameter		Cp/Cs, Lp/Ls, Rp/Rs, (Z), (Y), R, X, G, B, θ , D, Q, Vac, Iac			
DC Parameter		V_{DC} , I_{DC} , DCR			
Test Frequency	Range	10Hz ~ 15MHz	10Hz ~ 30MHz	10Hz ~ 50MHz	10Hz ~ 130MHz
	Resolution	1mHz			
	Relative frequency tolerance	$\leq \pm 0.0007\%$			
Test Level	AC Voltage	5mV ~ 2Vrms			
	Resolution	1mV			
	AC Current	50 μ A ~ 20mA _{rms}			
	Resolution	10 μ A			
DC Bias	Voltage	0V ~ ± 40 V			
	Resolution	1mV			
	Current	0mA ~ ± 100 mA			
	Resolution	40 μ A			

Models		SM6041A	SM6041B	SM6041C	SM6041D
Test Terminal Configuration		Four Terminal Pair			
Output Impedance		25Ω / 100Ω			
Typical Test Time (Speed)		Five Shift : 1 (Fast) ~ 5 (Accuracy) 1 : 2.5ms, 2 : 10ms, 3: 40ms, 4 : 80ms, 5 : 400ms (Does not include the arithmetic average of the communication time, each frequency test speed will be slightly different)			
Max Accuracy		1kHz : 0.08% 1MHz : 0.08% 2MHz : 0.5% 10MHz : 1% 130MHz : 5.0%			
Test Range		E : 1 x 10 ¹⁸			
Cs, Cp		-9.99999EF ~ +9.99999EF			
Ls, Lp		-9.99999EH ~ +9.99999EH			
D		-9.99999E ~ +9.99999E			
Q		-9.99999E ~ +9.99999E			
R, Rs, Rp, X, Z, R _{DC}		-9.99999EΩ ~ +9.99999EΩ			
G, B, Y		-9.99999ES ~ +9.99999ES			
Vdc		-9999V ~ +9999V			
Idc		-9999mA ~ +9999mA			
θ _r		-999999rad ~ +999999rad			
θ _s		-180.0° ~ +180.0°			
Δ%		-999999% ~ +999999%			
Multi-function parameter list scan		1601 points, each point can be set to average and each point can be sorted separately Sweep parameters : measurement parameters, test frequency, AC voltage, AC Current, DC Bias Voltage, DC Bias Current			
Graphic Scan	Parameters	Frequency, ACV, ACI, DCV, DCI			
	Types	Logarithmic, Linear, Frequency Segmentation			
	Points	2~1601			
	Number of Channels	4			
	Number of Curves	4 per Channel			
Split Screen		14 (Channel and Curve)			
Equivalent circuit analysis		3 elements model : 4, 4 element model : 3			
Sorting		10 levels of sorting in LCR mode, each curve in scan mode in sorted individually			
Interface		RS232C, USB HOST, USB DEVICE, LAN, GPIB, HANDLER, VGA, HDMI			
Display		10.1 inch TFT LCD Display 1280 x RGB X 800, Touch Screen			
Power on warm up time		60 Minutes			
Input Voltage		100~120VAC/198~242VAC Option : 47~63Hz			
Power Consumption		Max 150VA			
Measurement (WXHxD)		428x220x325			
Weight		14.5 Kg			
Standard Accessories		SMA26010 (Gold Plated short circuit board), SMA26005D Test Fixture, SMA26047A Test Fixture, SMA26082A 100Ω Standard resistance, SMA26061D_P1 Calibration kit, Mains cord			

Subject to change

scientific

Scientific Mes-Technik Pvt. Ltd.

B-14, Industrial Estate, Pologround, Indore 452 015, India

☎ 0731-2422330/31/32/33

✉ sales@scientificindia.com

🌐 www.scientificindia.com

Bengaluru 080-23452635
Chennai 044-42054180
Gujarat +917567463752
Hyderabad +917095228811
Kanpur +919981329105

✉ bangalore@scientificindia.com
✉ chennai@scientificindia.com
✉ gujarat@scientificindia.com
✉ hyderabad@scientificindia.com
✉ up@scientificindia.com

Kolkata +919630945856
Mumbai +919850901735
New Delhi +918770013379
Pune +919603828884

✉ kolkata@scientificindia.com
✉ mumbai@scientificindia.com
✉ ndelhi@scientificindia.com
✉ pune@scientificindia.com

