

Specifications

Note: All specifications apply to the unit after a temperature stabilization time of 30 minutes over an ambient temperature range of 23 °C ± 5 °C.

BA8100		
Input		
Voltage		0.5 V to 80 V
Power		200 W maximum (dissipated by internal load)
Settings		
Current	DC	0.5 A to 3 A (dissipated by internal load)
	Modulating AC Current	50 mArms to 300 mArms (10% of DCA typical)
Modulating Frequency	Range	0.05 Hz to 10 kHz
	Resolution (Auto)	0.001 Hz to 0.1 Hz
	Accuracy	0.01% of setting
Displayed Parameters		
Primary		X, Z, V, I, Freq.
Secondary		Rs, Rp, Xs, Xp, Cs, Cp, Ls, Lp, Q, D, and θ
Measurements		
Voltage 4-wire	Range	0 V to 80 V
	Resolution	0.1 mV
	Accuracy (ACI = 0) ⁽¹⁾	0.05% of reading + 0.05% of full scale
DC Sink Current	Range	0 A to 3 A
	Resolution	0.1 mA
	Accuracy (ACI = 0) ⁽¹⁾	0.5% of reading + 0.1% of full scale
Resistance R Auto sampling interval (8 to 10 cycles) and auto range enabled	Displayed Digits	5 digits including sign
	Resolution	1 $\mu\Omega$
	Accuracy (10 Hz to 10 kHz)	±(0.5% of reading + 5 $\mu\Omega$)
Impedance Z Auto sampling interval (8 to 10 cycles) and auto range enabled	Displayed Digits	5 digits including sign
	Resolution	1 $\mu\Omega$
	Accuracy (10 Hz to 10 kHz)	±(0.5% of reading + 5 $\mu\Omega$)
Phase Angle θ	Range	-180° to 180°
	Resolution	0.01°
	Accuracy	±0.3°
General		
AC Input		100 VAC to 240 VAC, 50/60 Hz
LIUT Connector		4-terminal banana jack
I/O Interfaces		LAN, USB (Virtual COM), RS232
Operating Temperature		32° F to 104° F (0° C to 40° C)
Storage Temperature		14° F to 122° F (-10° C to 50° C)
Dimension (W x H x D)		8.5" x 3.5" x 14.6" (215 x 90 x 370 mm)
Weight		9.9 lbs (4.5 kg)
Software		Bundled software for fixed or frequency sweep, Nyquist and Bode plots
Warranty		3 Years
Standard Accessories		Power cord, kelvin clip test leads, calibration certificate, calibration test fixture (TLC81)

(1) The accuracy of DC voltage and current should be under no modulation condition (i.e. AC current = 0).