



Model Number	9055	9045	9007	1101-B	2030-C
DC Voltage	0.1mV to 1000V 3(400mV__4/40V, 0.1mV__0.001/0.01V res) ±(1% rdg + 4 dgts) 1(400V, 0.1V res) ±(1.5% rdg + 4 dgts) 1(600V CAT IV, 1000V CAT III, 1V res) ±(1.5% rdg + 4 dgts)	0.1mV to 1000V 4(600mV__6/60/600V, 0.1mV__0.001/0.01/0.1V res) ±(0.5% rdg + 5 dgts) 1(600V CAT III, 1000V CAT II, 1V res) ±(0.8% rdg + 5 dgts)	1000V 4(200mV to 200V) 0.5% ± 2 digits 1(1000V) 0.8% ± 2 digits	0.1mV to 600V 3(200mV__2/20V, 0.1mV__0.001/0.01 res) ±(0.8% rdg + 4 dgts) 1(200V, 0.1V res) ±(0.8% rdg + 5 dgts) 1(600V CAT II, 1V res) ±(1.2% rdg + 5 dgts)	0.1mV to 600V 4(400mV__4/40/400V, 0.1mV__0.001/0.01/0.1V res) ±(0.8% rdg + 4 dgts) 1(200V, 0.1V res) ±(0.8% rdg + 5 dgts) 1(600V CAT II, 1V res) ±(1.2% rdg + 5 dgts)
AC Voltage (60Hz)	0.1mV to 700V 1(400mV, 0.1mV res) ±(1.5% rdg + 15 dgts) 2(4/40V, 0.001/0.01V res) ±(1% rdg + 4 dgts) 1(400V, 0.1V res) ±(1.5% rdg + 4 dgts) 1(600V CAT IV, 700V CAT III, 1V res) ±(2% rdg + 4 dgts)	0.001V to 750V True RMS 3(6/60/600V, 0.001/0.01/0.1V res) ±(0.8% rdg + 5 dgts) 1(600V CAT III, 750V CAT II, 1V res) ±(1.2% rdg + 5 dgts)	700V 1(200mV) 1.0% ± 5 digits 3(2V to 200V) 1.0% ± 3 digits 1(700V) 1.2% ± 5 digits	0.1V to 600V 1(200V, 0.1V res) ±(1.5% rdg + 5 dgts) 1(600V CAT II, 1V res) ±(1.5% rdg + 8 dgts)	0.1mV to 600V 1(400mV, 0.1mV res) ±(1.5% rdg + 5 dgts) 3(4/40/400V, 0.001/0.01/0.1V res) ±(0.8% rdg + 5 dgts) 1(600V CAT II, 1V res) ±(1.5% rdg + 5 dgts)
DC Current	0.1uA to 10A 2(400/4000uA, 0.1/1uA res) ±(1% rdg + 4 dgts) 2(40/400mA, 0.01/0.1mA res) ±(1.2% rdg + 4 dgts) 2(4/10A, 0.001/0.01A res) ±(2% rdg + 5 dgts)	0.1uA to 10A 2(600/6000uA, 0.1/1uA res) ±(2% rdg + 5 dgts) 2(60/600mA, 0.01/0.1mA res) ±(1.5% rdg + 5 dgts) 2(6/10A, 0.001/0.01A res) ±(2% rdg + 5 dgts)	20A 1(2mA) 1.0% ± 3 digits 2(20mA & 200mA) 1.5% ± 3 digits 1(20A) 2.5% ± 10 digits	0.001mA to 10A 2(2/20mA, 0.001/0.01mA res) ±(1.2% rdg + 5 dgts) 1(200mA, 0.1mA res) ±(2% rdg + 5 dgts) 1(10A, 0.01A res) ±(3% rdg + 5 dgts)	0.1uA to 400mA 2(400/4000uA, 0.1/1uA res) ±(2% rdg + 5 dgts) 2(40/400mA, 0.01/1mA res) ±(1.5% rdg + 5 dgts)

AC Current (60Hz)	0.1uA to 10A 2(400/4000uA, 0.1/1uA res) ±(1.2% rdg + 4 dgts) 2(40/400mA, 0.01/0.1mA res) ±(1.5% rdg + 4 dgts) 2(4/10A, 0.001/0.01A res) ±(2% rdg + 5 dgts)	0.1uA to 10A True RMS 2(600/6000uA, 0.1/1uA res) ±(2.5% rdg + 5 dgts) 2(60/600mA, 0.01/0.1mA res) ±(2% rdg + 5 dgts) 2(6/10A, 0.001/0.01A res) ±(2.5% rdg + 5 dgts)	20A 1(2mA) 1.2% ± 3 digits 2(200mA) 2.0% ± 3 digits 1(20A) 3.0% ± 10 digits	-	0.1uA to 400mA 2(400/4000uA, 0.1/1uA res) ±(2.5% rdg + 5 dgts) 2(40/400mA, 0.01/1mA res) ±(2% rdg + 5 dgts)
Resistance (Ohms)	0.1Ω to 40 MΩ 1(400Ω, 0.1Ω res) ±(1.5% rdg + 4 dgts) 3(4/40/400KΩ, 0.001/0.01/0.1KΩ res) ±(1.5% rdg + 3 dgts) 1(4MΩ, 0.001MΩ res) ±(2% rdg + 3 dgts) 1(40MΩ, 0.01MΩ res) ±(2.5% rdg + 3 dgts)	0.1Ω to 60M 4(600Ω__6/60/600K, 0.1Ω__0.001/0.01/0.1K res) ±(1% rdg + 5 dgts) 2(6/60M, 0.001/0.01M res) ±(2% rdg + 5 dgts)	200 to 200M 1(200) 1.0% ± 5 digits 1(2K) 1.0% ± 2 digits 3(20K to 2M) 1.2% ± 2 digits 1(20M) 2.0% ± 5 digits 1(200M) 5.0% ± (rdg - 10) + 10 digits	0.1Ω to 2M 1(200Ω, 0.1 res) ±(1.5% rdg + 5 dgts) 3(2/20/200K, 0.001/0.01/0.1K res) ±(1.2% rdg + 5 dgts) 1(2M, 0.001M res) ±(1.5% rdg + 5 dgts)	0.1Ω to 40M 5(400Ω__4/40/400K__4M, 0.1Ω__0.001/0.01/0.1K__0.001M res) ±(1% rdg + 3 dgts) 1(40M) ±(3% rdg + 5 dgts) 1.0__0.001/0.01/0.1K__0.001M res) ±(1% rdg + 3 dgts) 1(40M) ±(3% rdg + 5 dgts)
Frequency	0.001Hz to 10MHz 6(5/50/500Hz__5/50/500KHz, 0.001/0.01/0.1Hz__0.001/0.01/0.01K res) ±(1.2% rdg + 3 dgts) 2(5/10MHz, 0.001/0.01MHz res) ±(1.5% rdg + 4 dgts)	9.999Hz to 9.999MHz 7(10/100/1000Hz__10/100/1000KHz__9.999MHz, 0.01/0.1/1Hz__0.01/0.1/1KHz__0.001MHz res) ±(0.1% rdg + 5 dgts)	-	-	10Hz to 5KHz 3(50/500Hz__5KHz, 0.01/0.1Hz__0.001KHz res) ±(0.02% rdg + 2 dgts) 10Hz min measurement
Capacitance	1nF to 100uF 1(50nF, 0.01nF res) ±(5% rdg + 70 dgts) 4(500nF__5/50/100uF, 0.1nF__0.001/0.01/0.1uF res) ±(4% rdg + 5 dgts)	10nF to 4000uF 1(40nF, 0.01nF res) ±(5% rdg + 10 dgts) below 10nF: (unspecified) 3(400nF__4/40uF, 0.1nF__0.001/0.01uF res) ±(3% rdg + 5 dgts) 2(400/4000uF, 0.1/1uF res) ±(20% rdg + 20 dgts)	2nF to 200uF 1(2nF) 4.0% ± 70 digits 3(20nF to 2uF) 4.0% ± 3 digits 1(200uF) <20uF 5.0% ± 10 digits >20uF (unspecified)	-	40nF to 100uF 1(40nF, 0.01nF res) ±(5% rdg + 15 dgts) 3(400nF__4/40uF, 0.1nF__0.001/0.01uF res) ±(2.5% rdg + 10 dgts) 1(100uF, 0.1uF res) ±(3% rdg + 15 dgts)
Temperature (K-Type)	-4° to 1400°F 1(-4 to 1400F, 1F res) ±(3% rdg + 9 dgts) 1(-20 to 750C, 1C res) ±(3% rdg + 5 dgts)	-58° to 752°F (-58°F to 392°F, 2°F res) ±(0.75% rdg + 5 dgts) (32°F to 104°F, 2°F res) ± 5°F (392°F to 752°F, 2°F res) ±(1.5% rdg + 5 dgts) (-50°C to 200°C, 1°C res) ±(0.75% rdg + 3 dgts) (0°C to 40°C, 1°C res) ± 3°C (200°C to 400°C, 1°C res) ±(1.5% rdg + 3 dgts)	-	-4° to 1832°F (-4°F to 302°F, 1°F res) ±(3% rdg + 5 dgts) (302°F to 572°F, 1°F res) ±(3% rdg + 6 dgts) (572°F to 1832°F, 1°F res) ±(3.5% rdg + 15 dgts)	-
Continuity	✓	✓	✓	✓	✓
Diode Check	✓	✓	✓	✓	✓
Transistor Check (hFE)	-	-	-	✓	-
Duty Cycle	✓	✓	-	-	-
Total Ranges / Functions	53	44	31	19	36

Safety	Overload Protection	mV Ranges	600V CAT IV AC/DC, 1000V CAT III DC, 700V CAT III AC	1000VDC CAT II 750 VAC CAT II 600 AC/DC CAT III	250V AC/DC CAT I, II and III: 1000VDC / 700VAC CAT IV: 600V AC/DC	250V AC/DC	600V AC/DC CAT II
		Voltage Ranges (ex mV)	600V AC/DC for 15 seconds	600V AC/DC for 15 seconds	250V AC/DC	500V AC/DC	600V AC/DC
Ω Ranges	600V AC/DC	600V AC/DC	250V AC/DC	-	600V AC/DC		
Frequency	600V AC/DC	600V AC/DC	250V AC/DC	-	600V AC/DC		
Diode Test	600V AC/DC	600V AC/DC	250V AC/DC	500V AC/DC	600V AC/DC		
Continuity Beeper	600V AC/DC	600V AC/DC	250V AC/DC	500V AC/DC	600V AC/DC		
Logic	-	-	-	-	-		
Fuses	mA Jack	500mA / 600V	800mA/600V	200mA 250V Fuse	200mA / 500V	0.5A / 250V	
A Jack	10A / 600V	10A/600V	20A 250V Fuse (fast)	NOT FUSED, Apply 10A max >10 sec			
Agency Approval	CE (EMC and LVD) - EN: 61326 EN: 61010-1 - EN: 61010-02-031 IEC 1010-1 On Voltage Ranges Only. See "Overload Protection" above	CE IEC 1010-1 (EN 61010-1) On Voltage Ranges Only. See "Overload Protection" above	CE IEC 1010-1 On Voltage Ranges Only. See "Overload Protection" above	CE IEC 1010-1 On Voltage Ranges Only. See "Overload Protection" above	CE IEC 1010-1 (EN 61010-1) On Voltage Ranges Only. See "Overload Protection" above		

Battery	1 - 9 Volt	1 - 9 Volt	1 - 9 Volt	1 - 9 Volt	2 - 1.5V, LR-44 or SR-44
Dimensions	6.7" x 3" x 1.8"	7.0" x 3.7" x 1.5"	7.0" x 3.2" x 2.2"	2.7" x 5.7" x 1.2"	3.2" x 4.8" x 0.8"
Weight	11.2 oz	11.0 oz	14.1 oz	6.0 oz	3.5 oz

- Meters Not drawn to scale



	Model Number	9325	9305	9200-A
Digital Clamp-On Meter Functions	AC Current	0.1A to 1000A True RMS 1(600A, 0.1A res) ± (2.8% rdg + 8 dgts) 1(1000A, 1A res) ± (3.0% rdg + 8 dgts)	0.01A to 400A 1(40A, 0.01A res) ± (2.5% + 8 dgts) 1(400A, 0.1A res) ± (2.8% + 8 dgts)	0.01A to 300A 2(40/300A, 0.01/0.1A res) ± (1.8% rdg + 5 dgts)
	DC Current	0.1A to 1000A 1(600A, 0.1A res) ± (2.8% rdg + 5 dgts) 1(1000A, 1A res) ± (3.0% rdg + 5 dgts)	-	-
	AC Voltage	0.001V to 600V True RMS 2(6/60V, 0.001/0.01V res) ± (1.8% rdg + 8 dgts) 1(600V CAT III, 0.1V res) ± (1.8% rdg + 8 dgts)	0.001V to 600V 3(4/40/400V, 0.001/0.01/0.1V res) ± (1.8% + 8 dgts) 1(600V CAT III, 1V res) ± (2.5% + 8 dgts)	-
	DC Voltage	0.001V to 600V 1(600mV, 0.1mV res) ± (0.8% rdg + 2 dgts) 2(6/60V, 0.001/0.01V res) ± (1.5% rdg + 2 dgts) 1(600V CAT III, 0.1V res) ± (1.5% rdg + 2 dgts)	0.001V to 600V 1(400mV, 0.1mV res) ± (0.8% + 2 dgts) 3(4/40/400V, 0.001/0.01/0.1V res) ± (1.5% + 2 dgts) 1(600V CAT III, 1V res) ± (2.0% + 2 dgts)	-
	Resistance (Ohms)	0.1Ω to 60M 1(600Ω, 0.1Ω res) ± (1.0% rdg + 4 dgts) 3(6/60/600K, 0.001/0.01/0.1K res) ± (1.5% rdg + 2 dgts) 1(6M, 0.001M res) ± (2.5% rdg + 3 dgts) 1(60M, 0.01M res) ± (3.5% rdg + 5 dgts)	0.1Ω to 40M 1(400, 0.1 res) ± (1.0% + 4 dgts) 3(4/40/400K, 0.001/0.01/0.1K res) ± (1.5% + 2 dgts) 1(4M, 0.001M res) ± (2.5% + 3 dgts) 1(40M, 0.01M res) ± (3.5% + 5 dgts)	-
	Frequency	10Hz to 10KHz 4(10/100Hz __ 1/10K, 0.01/0.1Hz __ 0.001/0.01K res) ± (1.5% rdg + 2 dgts)	10Hz 10KHz 4(10/100Hz __ 1/10K, 0.01/0.1Hz __ 0.001/0.01K res) ± (1.5% rdg + 2 dgts)	-
	Capacitance	40nF to 4000µF 1(40nF, 0.01nF res) Unspecified 3(400nF __ 4/40µF, 0.1nF __ 0.001/0.01µF res) ± (3.0% rdg + 5 dgts) 1(400µF, 0.1µF res) ± (4.0% rdg + 10 dgts) 1(4000µF, 1µF res) ± (5.0% rdg + 10 dgts)	40nF to 100µF 1(40nF, 0.01nF res) ± (4.0% rdg + 20 dgts) 3(400nF __ 4/40µF, 0.1nF __ 0.001/0.01µF res) ± (3.0% rdg + 5 dgts) 1(100µF, 0.1µF res) ± (4.0% rdg + 10 dgts)	-
	Temperature (K-Type)	-4° to 1400°F 1(-4° to 1400°F, 1°F res) ± (3.0% + 9 dgts) 1(-20° to 760°C, 1°C res) ± (3.0% + 5 dgts)	-4° to 1400°F 1(-4° to 1400°F, 1°F res) ± (3.0% + 9 dgts) 1(-20° to 760°C, 1°C res) ± (3.0% + 5 dgts)	-
	Continuity	✓	✓	-
	Diode Check	✓	✓	-
	Duty Cycle	✓	-	-
Total Ranges / Functions	28	27	2	
Safety	Overload Protection All Ranges	CAT III 600V AC/DC	CAT III 600V AC	400A AC for 60 Seconds Max
	Agency Approval	CE IEC 1010-1	CE IEC 1010-1	CE IEC 1010-1
Physical	Battery	1 - 9 Volt	2 - AAA	1 - 3 Volt
	Max Cable Diameter	500MCM	450MCM	300MCM
	Dimensions	9.5" x 2.75" x 1.5"	8.0" x 2.25" x 1.25"	7.0" x 3.2" x 2.2"
	Weight	11.2 oz	8.0 oz	3.2 oz

- Meters Not drawn to scale



	Model Number	310	310-C	310-TEL	60	630
Analog VOM Functions	DC Voltage	1V to 1200V 5(3/12/60/300/1200V) +/- 3.0% full scale 20KΩ/Volt	1V to 600V 5(3/12/60/300/600V) +/- 3.0% full scale 20KΩ/Volt	1V to 300V 4(3/15/60/300V) +/- 3.0% full scale 20KΩ/Volt	0.1V to 1000V 8(0.3/3/10/30/1000V) +/- 1.5% full scale 20KΩ/Volt	0.1V to 600V 6(0.3/3/12/60/300/600V) +/- 1.5% full scale 20KΩ/Volt
	AC Voltage	1V to 1200V 5(3/12/60/300/1200V) +/- 4.0% full scale 5KΩ/Volt	1V to 600V 5(3/12/60/300/600V) +/- 4.0% full scale 15KΩ/Volt	1V to 1200V 4(3/15/60/300V) +/- 4.0% full scale 5KΩ/Volt	1V to 1000V 6(3/10/30/100/300/1000V) +/- 3.0% full scale 5KΩ/Volt	1V to 600V 5(3/12/60/300/600V) +/- 3.0% full scale 5KΩ/Volt
	DC Current	0.3mA to 600mA 4(0.6/6/60/600mA) +/- 3.0% full scale 250mV/330mV Burden	0.3mA to 600mA 4(0.6/6/60/600mA) +/- 3.0% full scale 250mV/330mV Burden	0.3mA to 600mA 4(0.6/6/60/600mA) +/- 3.0% full scale 250mV/330mV Burden	0.03mA to 1000mA 4(0.1/10/100/1000mA) +/- 1.5% full scale 320mV Burden	0.02mA to 120mA 4(0.06/1.2/12/120mA) 1.5% full scale 300mV Burden
	Resistance	1Ω to 20M 4(200Ω/2K/20K/200K Center Scale) +/- 3.0% scale length	1Ω to 20M 4(200Ω/2K/20K/200K Center Scale) +/- 3.0% scale length	1Ω to 20M 4(200Ω/2K/20K/200K Center Scale) +/- 3.0% scale length	0.2Ω to 10M 5(12Ω/120Ω/1.2K/12K/120K Center Scale) +/- 1.5% scale length	0.1 Ω to 10M 5(4.4Ω/44Ω/440Ω/4.4K/44K Center Scale) +/- 1.5% scale length
	dB Ranges	-	-	-	-20dBm to +52dBm 5(+12/+22/+32/+42/+52dBm)	-20dBm to 57dBm 5(+11/+23/+37/+51/+57)
	Total Ranges / Functions	18	18	2	28	25
Safety	Meter Protection	Diode Meter Protection	Diode Meter Protection	Diode Meter Protection	Diode Meter Protection / Gas Discharge Tube	Diode Meter Protection
	Fuse	1/16A / 250V	1/16A / 250V	1/16A / 250V	1/5A / 250V - 1A / 250V - 2A / 1000V	2A / 600V - 1A / 250V
Physical	Battery	1 - 12 Volt, 1 - N-Cell	1 - 12 Volt, 1 - N-Cell	1 - NEDA 220, 1 - NEDA 910F	1 - 9 Volt, 1 - D-Cell	1 - 30 Volt, 1 - D-Cell
	Dimensions	2.75" x 1.3" x 4.25"	2.75" x 1.3" x 4.25"	2.75" x 1.3" x 4.25"	3.25" x 5.25" x 7.25"	3.3" x 5.5" x 7.5"
	Weight	7.2 oz	7.2 oz	7.2 oz	4 lbs	5 lbs

- Meters Not drawn to scale