

Table 1-1. Specifications.

DC VOLTmeter.

Accuracy: (for 1 year at 23°C ± 5°C):

Range	Max. Display	Accuracy
± 20 mV	19.999 mV	± (.05% of reading + 3 digits)
± 200 mV	199.99 mV	± (.04% of reading + 1 digit)
± 2 V	1.9999 V	± (.03% of reading + 1 digit)
± 20 V	19.999 V	± (.03% of reading + 1 digit)
± 200 V	199.99 V	± (.03% of reading + 1 digit)
± 1200 V	1199.9 V	± (.035% of reading + 1 digit)

Maximum Input: ± 1200 V (dc + peak ac).

Ranging: Automatic or Manual.

Input Type: Floating (500 V max. from COM to earth ground).

Input Resistance: 10 MΩ ± 0.5% (all ranges).

Sensitivity: 1 μV on the 20 mV range.

Polarity: Automatically sensed and displayed.

Response Time: < 0.7 seconds to within 1 digit of final value on one range. Add 0.8 seconds for each range change.

Temperature Coefficient: ± (.003% of reading + 0.15 Digits)/°C (0°C to 18°C and 28°C to 55°C).

Normal-Mode Rejection: ≥ 60 dB at 50/60 Hz ± 0.1%.

Effective Common-Mode Rejection: ≥ 140 dB at dc; 120 dB at 50/60 Hz ± .1% (1 kΩ imbalance).

AC VOLTmeter (TRUE RMS).

AC Converter: True RMS.

Range	Max. Display
200 mV	199.99 mV
2 V	1.9999 V
20 V	19.999 V
200 V	199.99 V
1200 V	1199.9 V

Sinewave Accuracy: (for 1 year at 23°C ± 5°C and at > 1900 digits):

Frequency	Accuracy (all ranges)
20 Hz – 30 Hz	± (.2% of reading + 50 digits)
30 Hz – 50 Hz	± (.1% of reading + 30 digits)
50 Hz – 20 kHz	± (.03% of reading + 20 digits)
20 kHz – 50 kHz	± (.1% of reading + 30 digits)
50 kHz – 100 kHz	± (.2% of reading + 150 digits)

Maximum Input: 600 Vdc or 1700 (dc + peak ac), 10⁷ V Hz.

Ranging: Automatic or Manual.

Input Type: Floating (500 V max. from COM to earth ground).

Input Impedance: Resistance: 2 MΩ ± 0.5%.
Shunt Capacitance: < 50 pF.

Sensitivity: 10 μV on the 200 mV range.

Response Time: < 4.5 seconds to within 4 digits of final value on one range. Add 1.2 seconds for each range change.

Temperature Coefficient: (0°C to 18°C and 28°C to 55°C):

Frequency	Temperature Coefficient (all ranges)
20 Hz to 30 Hz and 50 kHz to 100 kHz	± (.05% of reading + 5 digits)/°C
30 Hz to 50 Hz and 20 kHz to 50 kHz	± (.05% of reading + 2 digits)/°C
50 Hz to 20 kHz	± (.03% of reading + .5 digits)/°C

Maximum Crest Factor: 4 to 1

DC + AC VOLTmeter (TRUE RMS).

Range	Max. Display
200 mV	199.99 mV
2 V	1.9999 V
20 V	19.999 V
200 V	199.99 V
1200 V	1199.9 V

Accuracy: (for 1 year at 23°C ± 5°C and at > 1900 digits):

DC + 20 Hz to 50 kHz	± (.1% of reading + 80 digits)
DC + 50 kHz to 100 kHz	± (.2% of reading + 200 digits)

Maximum Input: 600 Vdc or 1700 V (dc + peak ac), 10⁷ V Hz

Ranging: Automatic or Manual.

Input Type: Floating (500 V max. from COM to earth ground).

Input Impedance: Resistance: 2 MΩ ± 0.5%.
Shunt Capacitance: < 50 pF.

Sensitivity: 10 μV on the 200 mV range.

Response Time: < 4.5 seconds to within 4 digits of final value on one range. Add 1.2 seconds for each range change.

Temperature Coefficient: (0°C to 18°C and 28°C to 55°C):

Frequency	Temperature Coefficient *For all ranges except 200 mV
DC + (50 Hz to 20 kHz)	± (.03% of reading + 6 digits)/°C
DC + (30 Hz to 50 Hz and 20 kHz to 50 kHz)	± (.05% of reading + 6 digits)/°C
DC + (20 Hz to 30 Hz and 50 kHz to 100 kHz)	± (.05% of reading + 10 digits)/°C

*Add 5 digits/°C for the 200 mV range.

Table 1-1. Specifications (Cont'd).

DC AMMETER

Accuracy: (for 1 year at 23°C ± 5°C):

Range	Max. Display	Shunt Resistance	Accuracy
200 μ A	199.99 μ A	1000 Ω	± (.07% of reading + 2 digits)
2 mA	1.9999 mA	100 Ω	± (.07% of reading + 2 digits)
20 mA	19.999 mA	10 Ω	± (.07% of reading + 2 digits)
200 mA	199.99 mA	1 Ω	± (.15% of reading + 2 digits)
2000 mA	1999.9 mA	0.1 Ω	± (.5% of reading + 2 digits)

Maximum Input: ± 2 Amps from ≤ 250 V Source.

Ranging: Manual only.

Input Type: Floating (500 V max. from COM to earth ground).

Sensitivity: 10 nA on the 200 μ A range.

Polarity: Automatically sensed and displayed.

Temperature Coefficient: (0°C to 18°C and 28°C to 55°C):

Range	Temperature Coefficient
200 μ A thru 20 mA	± (.004% of reading + .15 digits)/°C
200 mA thru 2000 mA	± (.01% of reading + .15 digits)/°C

Voltage Burden:

Range	Max. Burden at Full Scale
200 μ A thru 20 mA	< 200 mV
200 mA	< 240 mV
2000 mA	< 600 mV

AC AMMETER (TRUE RMS).

Range	Max. Display
200 μ A	199.99 μ A
2 mA	1.9999 mA
20 mA	19.999 mA
200 mA	199.99 mA
2000 mA	1999.9 mA

Sinewave Accuracy: (for 1 year at 23°C ± 5°C and at > 1900 digits):

Range	Frequency	Accuracy
200 μ A thru 200 mA	20 Hz to 30 Hz	± (.2% of reading + 50 digits)
	30 Hz to 10 kHz	± (.9% of reading + 35 digits)
2000 mA	20 Hz to 30 Hz	± (.2% of reading + 50 digits)
	30 Hz to 10 kHz	± (.1.2% of reading + 20 digits)

Minimum Display: 1900 digits.

Maximum Input: 2 Amps rms from ≤ 250 V rms source.

Ranging: Manual only.

Input Type: Floating (500 V max. from COM to earth ground).

Input Protection: 2A, 250 V Fuse.

Sensitivity: 10 nA on the 200 μ A range.

Temperature Coefficient: (0°C to 18°C and 28°C to 55°C):

Range	Temperature Coefficient
200 μ A thru 200 mA	± (.03% of reading + .5 digits)/°C
2000 mA	± (.04% of reading + .5 digits)/°C

Maximum Crest Factor: 4 to 1

Voltage Burden:

Range	Max. Burden at Full Scale
200 μ A thru 20 mA	< 220 mV rms
200 mA	< 240 mV rms
2000 mA	< 600 mV rms

DC + AC AMMETER (TRUE RMS).

Range	Max. Display
200 μ A	199.99 μ A
2 mA	1.9999 mA
20 mA	19.999 mA
200 mA	199.99 mA
2000 mA	1999.9 mA

Accuracy: (for 1 year at 23°C ± 5°C)

Range	Frequency	Accuracy
200 μ A thru 2000 mA	20 Hz to 10 kHz	± (.1.5% of reading + 80 digits)

Minimum Display: 1900 digits.

Maximum Input: 2 Amps rms from ≤ 250 V rms source.

Ranging: Manual only.

Input Type: Floating (500 V max. from COM to earth ground).

Input Protection: 2A, 250 V Fuse.

Sensitivity: 10 nA on the 200 μ A range.

Response Time: < 4.5 seconds to within 4 digits of final value.

Temperature Coefficient: ± (.03% of reading + 10 digits)/°C (0°C to 18°C and 28°C to 55°C).

Maximum Crest Factor: 4 to 1

Voltage Burden:

Range	Max. Burden at Full Scale
200 μ A thru 20 mA	< 220 mV rms
200 mA	< 240 mV rms
2000 mA	< 600 mV rms

Table 1-1. Specifications (Cont'd).

OHMMETER.

Accuracy: (for 1 year at 23°C ± 5°C):

Range	Max. Display	Voltage at 10000 Digits	Output Current	Accuracy
20 Ω	19.999 Ω	50 mV	5 mA	± (.08% of reading + 2 digits)
200 Ω	199.99 Ω	500 mV	5 mA	± (.08% of reading + 2 digits)
2 kΩ	1.9999 kΩ	1 V	1 mA	± (.03% of reading + 1 digit)
20 kΩ	19.999 kΩ	1 V	100 μA	± (.03% of reading + 1 digit)
200 kΩ	199.99 kΩ	1 V	10 μA	± (.03% of reading + 1 digit)
2 MΩ	1999.9 kΩ	1 V	1 μA	± (.04% of reading + 1 digit)
20 MΩ	19.999 MΩ	1 V	100 nA	± (.15% of reading + 1 digit)

Ranging: Automatic or Manual.

Input Configuration: 2 wire with lead zero (700 mΩ adjust-ment range on the 20 Ω and 200 ranges only).

Sensitivity: 1 mΩ on the 20 Ω range.

Output Voltage: < 5 volts dc.

Overload Protection: 350 V (dc + peak ac).

Temperature Coefficient: (0°C to 18°C and 28°C to 55°C):

Range	Temperature Coefficient
20 Ω thru 2 MΩ	± (.002% of reading + .05 digits)/°C
20 MΩ	± (.01% of reading + .1 digits)/°C

Response Time: < 1.1 seconds to within 1 digit of final value on one range. Add 0.8 seconds for each range change.

DIODE TEST.Function:  (kΩ).Range:  (2 kΩ).

Test Current: 1 mA ± 1.5%.

Maximum Measureable Voltage Drop: 1.9999 volts.

Overload Protection: 350 V (dc + peak ac).

Table 1-2. General Information.

GENERAL:Display: 7 segment RED 0.3 inch high LED's.
Function and range annunciation.

Reading Rate: 2.4 - 4.7/sec. depending on input level.

A-D Conversion: Dual slope.

Integration Time: 100 msec.

Ranging: Automatic or manual in acV, dcV, acV + dcV and Ohms. Manual only in acI, dcI and acI + dcI.

Storage Temperature: (-55 to +75)°C; (-55 to +65)°C with batteries.

Operating Temperature: (0 to 55)°C.

Humidity: 0 - 95% RH at 40°C.

Power: AC line; 48 - 440 Hz	86-106 V Opt. 100
	104-127 V Opt. 115
	190-233 V Opt. 210
	208-250 V Opt. 230

Battery: 8 hours minimum continuous operation.
Recharge Time: 16 hours operating, 12 hours non-operating, 1.5 hour recharge provides 3 hours of continuous use.

Maximum Power Dissipation: 9 watts - with battery charger.
4 watts - AC only.

Configuration: 3466A Std, Streamlined portable case with handle, ac line power. Rechargeable batteries, and recharger included.

3466A Option 001, Streamlined portable case, ac line power only.

Dimensions: 3466A: 23.81 cm (9 3/8") wide x 9.84 cm (3 7/8") high X 27.62 cm (10 7/8") long.

Weight: 3466A: 2.77 kg (6 lbs 2 oz.)
3466A Option 001: 1.98 kg (4 lbs 6 oz.)

Table 1-3. Options.

Standard	Streamlined portable case with handle, AC line or re-chargeable battery operation with battery charger included.
Option 001	Streamlined portable case with handle, AC line operation only.
Option 002	Rack Mount case AC line operation only.
Option 100	86 - 106 Vac 48 - 440 Hz 9 Watts (Standard)
Option 115	104 - 127 Vac 48 - 440 Hz 9 Watts (Standard)
Option 210	190 - 233 Vac 48 - 440 Hz 9 Watts (Standard)
Option 230	208 - 250 Vac 48 - 440 Hz 9 Watts (Standard)
Option 910	An additional Operating and Service Manual.

Table 1-4. Accessories.

11002A	Test leads (dual banana to dual alligator).
11003A	Test leads dual banana to probe and alligator.
11096B	RF Probe 10 kHz to 700 MHz, use only 10 V and 100 V dc ranges.
34110A	Soft vinyl carrying/operating case.
34111A	High voltage probe, 40 kV dc.
34112A	Touch - Hold, input probe.
11067A	Test lead kit.