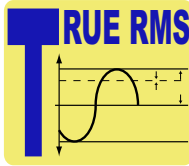


# Data sheet

## Auto Ranging True RMS Tool Kit® DMM Model 2708B



### Auto/ Manual Ranging



Select between Auto or Manual ranging

The 2708B is a full-featured auto ranging true RMS DMM that combines performance, value and functionality. The 3400 count LCD has a 34 segment bar graph that simulates analog responsiveness. The 2708B can measure resistance values up to 34 MΩ. With the auto power-off-feature you won't have to worry about accidental battery consumption. Value-packed features make this meter a must in every "Tool Kit".

### Features

- Magnetic hanger
- True RMS
- Auto power off
- DC voltage to 1000 V
- Resistance to 34 MΩ
- Diode test
- One-handed operation
- Auto/manual ranging
- Measures up to 10 A (AC & DC)
- AC voltage to 750 V
- Continuity test

### Bar Graph

The 34 segment bar graph simulates an analog display by updating at a rate of 12 times per second.



## Specifications

model

2708B

### DC Volts

|                     |   |
|---------------------|---|
| Ranges              | 340 mV, 3.4 V, 34 V, 340 V, 1000V                     |
| Resolution          | 0.1 mV, 1 mV, 10 mV, 100 mV, 1 V                      |
| Accuracy            | ±(1.0 % rdg + 2 dgts)                                 |
| Input Impedance     | 340 mV: >100 MΩ; 3.4 V: 10 MΩ; 34 V to 1000 V: 9.1 MΩ |
| Overload Protection | 1000 VDC or 750 VACrms                                |

### AC Volts (50 Hz-500 Hz) True RMS

|                     |   |
|---------------------|---|
| Crest Factor        | <3  |
| Ranges              | 3.4 V, 34 V, 340 V, 750 V   |
| Resolution          | 1 mV, 10 mV, 100 mV, 1 V  |
| Accuracy            | 3.4 V & 34 V ranges: ±(2.0 % rdg + 8 dgts)<br>340 V & 750 V ranges: ±(2.0 % rdg + 8 dgts) |
| Input Impedance     | 3.4 V: 10 MΩ; 34 V to 1000 V: 9.1 MΩ  |
| Overload Protection | 1000 VDC or 750 VACrms  |

### DC Current

|                  |   |
|------------------|---|
| Ranges           | 340 uA, 3400 uA, 34 mA, 340 mA, 10 A  |
| Resolution       | 0.1 uA, 1 uA, 10uA, 100 uA, 10 mA   |
| Accuracy         | 340 uA to 340 mA ranges: ±(2.0 % rdg + 2 dgts)<br>10 A range: ±(3.0 % rdg + 3 dgts) |
| Input Protection | 0.5 A/500 V & 10 A/600 V fast blow ceramic fuses                                    |
| 10A Input        | 10 A for 60 sec max. followed by a 10 minute cooling period                         |

### AC Current (50 Hz-500 Hz) True RMS

|                  |   |
|------------------|---|
| Crest Factor     | <3  |
| Ranges           | 340 uA, 3400 uA, 34 mA, 340 mA, 10 A  |
| Resolution       | 0.1 uA, 1 uA, 10uA, 100 uA, 10 mA   |
| Accuracy         | 340 uA to 340 mA ranges: ±(2.5 % rdg + 10 dgts)<br>10 A range: ±(3.5 % rdg + 10 dgts) |
| Input Protection | 0.5 A/500 V & 10 A/600 V fast blow ceramic fuses                                      |
| 10A Input        | 10 A for 60 sec max. followed by a 10 minute cooling period                           |

### Resistance

|                                |  |
|--------------------------------|--|
| Ranges                         | 340 Ω, 3.4 kΩ, 34 kΩ, 340 kΩ, 3.4 MΩ, 34 MΩ  |
| Resolution                     | 0.1 Ω, 1.0 Ω, 10 Ω, 100 MΩ, 1 kΩ, 10 kΩ  |
| Accuracy                       | 340 Ω to 340 kΩ ranges: ±(1.5 % rdg + 4 dgts)<br>3.4 MΩ range: ±(2.5 % rdg + 4 dgts)<br>34 MΩ range: ±(5.0 % rdg + 5 dgts) |
| Open Circuit Voltage (typical) | -0.45 VDC (-1.2 VDC on 340 Ω range)  |
| Overload Protection            | 500 VDC/ACrms  |

### Diode Test

|                      |                       |
|----------------------|-----------------------|
| Test Current         | 1.0 mA (typical)      |
| Resolution           | 10 mV                 |
| Accuracy             | ±(3.0 % rdg + 3 dgts) |
| Audible Indication   | <0.25 V               |
| Open Circuit Voltage | 3.0 VDC (typical)     |
| Overload Protection  | 500 VDC/ACrms         |

### Continuity

|                     |                |
|---------------------|----------------|
| Audible Indication  | Less than 35 Ω |
| Response Time       | 500 ms         |
| Overload Protection | 500 VDC/ACrms  |

### General

|                         |   |
|-------------------------|---|
| Display                 | 3 3/4 digit, 3400 count LCD with 34 segment analog bar graph                      |
| Polarity                | Automatic, positive implied, negative polarity indication                         |
| Overrange               | OL or -OL is displayed  |
| Low Battery Indication  | The battery symbol will display when battery voltage drops below operating levels |
| Measurement Rate        | 2 times per second (12 times per second for analog bar graph)                     |
| Auto Power Off          | Approximately 10 minutes  |
| Operating Environment   | 0°C to 50°C at <70 % relative humidity  |
| Storage Environment     | -20°C to 60°C at 0 to 80 % relative humidity                                      |
| Accuracies              | Stated accuracy at 23°C + 5°C at <75 % relative humidity                          |
| Temperature Coefficient | 0.1 x (specified accuracy) per °C. (°C to 18°C, 28°C to 50°C)                     |
| Power                   | Single standard 9 volt battery, NEDA 1604, JIS 006P, IEC 6F22                     |
| Battery Life            | 150 hours typical   |
| Dimensions              | 165 mm (H) x 78 mm (W) x 42.5 mm (D)  |
| Weight                  | Approximately 10.3 oz. (377 g) with battery and hanger                            |

**One Year Warranty**

### Accessories

Supplied: One set test leads, one spare fuse, 9V battery (installed) and instruction manual

# B&K Precision's 2700 Tool Kit® Series

## Models 2703C, 2704C, 2705B, 2706B, 2707B, 2708B, 2709B & 2712

These excellent meters are for most jobs that require flexibility, accuracy and speed. Value-packed features make these meters a must for everyone's "Tool Kit®".

Common Features:

- DC Voltage to 1000V
- DC Current to 10A
- Diode test
- Magnetic hanging strap
- AC Voltage to 750V
- Continuity test
- Drop resistant case



**Magnetic Hanging Strap**

This convenient feature allows you to hang your DMM on any magnetic metallic surface freeing up your hands for troubleshooting.

**Back Light / Easy-to-Read LCD**

Model 2706B

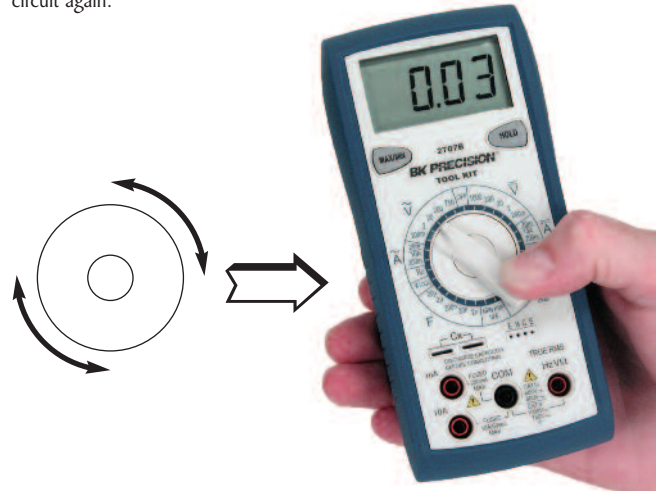
Ultra-bright blue LCD back light for low ambient light measurements

Model 2709B

Large easy-to-read LCD with green LED backlight

### Single-handed operation

The ergonomic design allows both left and right handed users to rotate the knob while holding the meter in one hand. While one hand keeps the probe on the circuit, the other hand changes the meter's function. This speeds up troubleshooting because you don't have to locate the probe point in the circuit again.



| Features          | models      |              |             |            |              |             |            |         |
|-------------------|-------------|--------------|-------------|------------|--------------|-------------|------------|---------|
|                   | 2712        | 2709B        | 2708B       | 2707B      | 2706B        | 2705B       | 2704C      | 2703C   |
| Ranging           | Auto/Manual | Auto/Manual  | Auto/Manual | Manual     | Manual       | Auto/Manual | Manual     | Manual  |
| True RMS          | AC + DC     | √            | √           | √          | -            | -           | -          | -       |
| Current           | 10 A AC/DC  | 10 A AC/DC   | 10 A AC/DC  | 10 A AC/DC | 200 mA AC/DC | 10 A AC/DC  | 10 A AC/DC | 10 A DC |
| Capacitance       | to 40 uF    | to 66,000 uF | -           | to 20 uF   | to 20 mF     | -           | to 20 uF   | -       |
| Transistor Test   | -           | -            | -           | √          | -            | -           | √          | -       |
| Frequency Counter | to 500 kHz  | to 66 MHz    | -           | √          | to 40 kHz    | -           | √          | -       |
| Temperature       | -           | -            | -           | -          | √            | -           | -          | -       |
| Logic Probe       | -           | -            | -           | √          | -            | -           | √          | -       |
| Backlight LCD     | √           | √            | -           | -          | √            | -           | -          | -       |
| Analog Bar Graph  | √           | -            | √           | -          | -            | -           | -          | -       |
| Battery Test      | -           | -            | -           | -          | -            | -           | -          | √       |
| Auto Power off    | √           | √            | √           | -          | √            | √           | -          | -       |