

Digital Multimeter Comparision Chart

|                      | PC Connection                                                                     |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     | Standard                                                                            |                                                                                     |                                                                                     |                      | Multifunction                                                                       |                                                                                     | All-in-one                                                                          | Pocket-size                                                                         |                                                                                     |                                                                                     |                                                                                     | Safe                                                                                | DMM+Clamp                                                                           |
|----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Model                | PC7000                                                                            | PC710                                                                             | PC700                                                                             | PC720M                                                                            | PC773                                                                               | PC20                                                                                | CD772                                                                               | CD771                                                                               | CD770                                                                               | Model                | RD700/701                                                                           | CD732                                                                               | CD800a                                                                              | PM3                                                                                 | PM11                                                                                | PM7a                                                                                | PS8a                                                                                | KP1                                                                                 | PM33a                                                                               |
|                      |  |  |  |  |  |  |  |  |  |                      |  |  |  |  |  |  |  |  |  |
| Page                 | P10                                                                               | P10                                                                               | P11                                                                               | P11                                                                               | P12                                                                                 | P12                                                                                 | P13                                                                                 | P13                                                                                 | P13                                                                                 | Page                 | P14                                                                                 | P14                                                                                 | P14                                                                                 | P15                                                                                 | P15                                                                                 | P15                                                                                 | P15                                                                                 | P16                                                                                 | P16                                                                                 |
| Count                | 50000                                                                             | 9999                                                                              | 9999                                                                              | 9999                                                                              | 11000                                                                               | 4000                                                                                | 4000                                                                                | 4000                                                                                | 4000                                                                                | Count                | 4000                                                                                | 6000                                                                                | 4000                                                                                | 4000                                                                                | 4000                                                                                | 4000                                                                                | 4000                                                                                | 9999                                                                                | 6600                                                                                |
|                      | 500000                                                                            | 6000                                                                              | 6000                                                                              | 6000                                                                              |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                      |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Category             | CATIII 600V<br>CAT II 1000V                                                       | CATIII 600V<br>CAT II 1000V                                                       | CATIII 600V<br>CAT II 1000V                                                       | CATIII 600V<br>CAT II 1000V                                                       | CATIII 600V<br>CAT II 1000V                                                         | -<br>-                                                                              | CATIII 600V<br>CAT II 1000V                                                         | CATIII 600V<br>CAT II 1000V                                                         | -<br>-                                                                              | Category             | -<br>-                                                                              | CATIII 600V<br>CAT II 1000V                                                         | -<br>-                                                                              | CAT II 500V                                                                         | CATIII 300V<br>CAT II 500V                                                          | -<br>-                                                                              | -<br>-                                                                              | CAT IV 600V<br>CAT III 1000V                                                        | CAT III 300V<br>CAT II 600V                                                         |
| CE                   | ●                                                                                 | ●                                                                                 | ●                                                                                 | ●                                                                                 | ●                                                                                   | -                                                                                   | ●                                                                                   | ●                                                                                   | -                                                                                   | CE                   | -                                                                                   | ●                                                                                   | -                                                                                   | ●                                                                                   | ●                                                                                   | -                                                                                   | -                                                                                   | ●                                                                                   | ●                                                                                   |
| True RMS (AC)        | ●                                                                                 | ●                                                                                 | -                                                                                 | ●                                                                                 | ●                                                                                   | -                                                                                   | ●                                                                                   | -                                                                                   | -                                                                                   | True RMS (AC)        | RD701 only                                                                          | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | ●                                                                                   | -                                                                                   |
| Range                | A/M                                                                               | A/M                                                                               | A/M                                                                               | A/M                                                                               | A/M                                                                                 | A/M                                                                                 | A/M                                                                                 | A/M                                                                                 | A/M                                                                                 | Range                | A/M                                                                                 | A/M                                                                                 | A/M                                                                                 | A                                                                                   | A                                                                                   | A/M                                                                                 | A/M                                                                                 | A                                                                                   | A/M                                                                                 |
| DCV(V) max           | 1000                                                                              | 999.9                                                                             | 999.9                                                                             | 999.9                                                                             | 1000                                                                                | 1000                                                                                | 1000                                                                                | 1000                                                                                | 600                                                                                 | DCV(V) max           | 1000                                                                                | 1000                                                                                | 600                                                                                 | 500                                                                                 | 500                                                                                 | 500                                                                                 | 500                                                                                 | 999.9                                                                               | 600                                                                                 |
| ACV(V) max           | 1000                                                                              | 999.9                                                                             | 999.9                                                                             | 999.9                                                                             | 1000                                                                                | 750                                                                                 | 1000                                                                                | 1000                                                                                | 600                                                                                 | ACV(V) max           | 1000                                                                                | 750                                                                                 | 600                                                                                 | 500                                                                                 | 500                                                                                 | 500                                                                                 | 500                                                                                 | 999.9                                                                               | 600                                                                                 |
| DCA(A) max           | 10                                                                                | 10                                                                                | 10                                                                                | 10                                                                                | 11                                                                                  | 10                                                                                  | 15                                                                                  | 10                                                                                  | 400m                                                                                | DCA(A) max           | 10                                                                                  | 15                                                                                  | 400m                                                                                | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | 100(CT)                                                                             |
| ACA(A) max           | 10                                                                                | 10                                                                                | 10                                                                                | 10                                                                                | 11                                                                                  | 10                                                                                  | 15                                                                                  | 10                                                                                  | 400m                                                                                | ACA(A) max           | 10                                                                                  | 15                                                                                  | 400m                                                                                | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | 100(CT)                                                                             |
| Resistance(Ω) max    | 50M                                                                               | 60M                                                                               | 60M                                                                               | 60M                                                                               | 110M                                                                                | 40M                                                                                 | 40M                                                                                 | 40M                                                                                 | 40M                                                                                 | Resistance(Ω) max    | 40M                                                                                 | 60M                                                                                 | 40M                                                                                 | 40M                                                                                 | 40M                                                                                 | 40M                                                                                 | 40M                                                                                 | -                                                                                   | 66M                                                                                 |
| MΩ test voltage      | -                                                                                 | -                                                                                 | -                                                                                 | -                                                                                 | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | MΩ test voltage      | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   |
| Capacitance (F) max  | 25m                                                                               | 25m                                                                               | 25m                                                                               | 25m                                                                               | 110m                                                                                | 100 μ                                                                               | 100 μ                                                                               | 100 μ                                                                               | 100 μ                                                                               | Capacitance (F) max  | 3000 μ                                                                              | 4000 μ                                                                              | 100 μ                                                                               | 200 μ                                                                               | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | 66m                                                                                 |
| Temperature(°C) min  | -50                                                                               | -50                                                                               | ▲                                                                                 | -50                                                                               | ▲                                                                                   | ▲                                                                                   | -20                                                                                 | -                                                                                   | -                                                                                   | Temperature(°C) min  | -20                                                                                 | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   |
| Temperature(°C) max  | 1000                                                                              | 1000                                                                              | ▲                                                                                 | 1000                                                                              | ▲                                                                                   | ▲                                                                                   | 300                                                                                 | -                                                                                   | -                                                                                   | Temperature(°C) max  | 300                                                                                 | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   |
| Frequency (Hz) min   | 10                                                                                | 15                                                                                | 15                                                                                | 15                                                                                | 110                                                                                 | -                                                                                   | 5                                                                                   | 5                                                                                   | 5                                                                                   | Frequency (Hz) min   | 50                                                                                  | 5                                                                                   | 5                                                                                   | 1                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | 20                                                                                  |
| Frequency (Hz) max   | 200k                                                                              | 50k                                                                               | 50k                                                                               | 50k                                                                               | 1.1M                                                                                | -                                                                                   | 100k                                                                                | 100k                                                                                | 100k                                                                                | Frequency (Hz) max   | 1M                                                                                  | 99.99k                                                                              | 100k                                                                                | 60k                                                                                 | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | 66k                                                                                 |
| Logic freq. (Hz) min | 5                                                                                 | 5                                                                                 | 5                                                                                 | 5                                                                                 | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | Logic freq. (Hz) min | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   |
| Logic freq. (Hz) max | 2M                                                                                | 1M                                                                                | 1M                                                                                | 1M                                                                                | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | Logic freq. (Hz) max | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   |
| Continuity           | Buzzer                                                                            | Buzzer                                                                            | Buzzer                                                                            | Buzzer                                                                            | Buzzer                                                                              | Buzzer                                                                              | Buzzer                                                                              | Buzzer                                                                              | Buzzer                                                                              | Continuity           | Buzzer                                                                              | Buzzer                                                                              | Buzzer                                                                              | Buzzer                                                                              | Buzzer                                                                              | Buzzer                                                                              | Buzzer                                                                              | Buzzer                                                                              | Buzzer                                                                              |
|                      |                                                                                   |                                                                                   |                                                                                   |                                                                                   | LED                                                                                 |                                                                                     | LED                                                                                 | LED                                                                                 |                                                                                     |                      |                                                                                     |                                                                                     |                                                                                     | LED                                                                                 |                                                                                     |                                                                                     |                                                                                     | LED                                                                                 |                                                                                     |
| Diode test           | ●                                                                                 | ●                                                                                 | ●                                                                                 | ●                                                                                 | ●                                                                                   | ●                                                                                   | ●                                                                                   | ●                                                                                   | ●                                                                                   | Diode test           | ●                                                                                   | ●                                                                                   | ●                                                                                   | ●                                                                                   | ●                                                                                   | ●                                                                                   | ●                                                                                   | -                                                                                   | ●                                                                                   |
| Ducy cycle           | ●                                                                                 | ●                                                                                 | ●                                                                                 | ●                                                                                 | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | Ducy cycle           | -                                                                                   | ●                                                                                   | ●                                                                                   | ●                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | ●                                                                                   |
| d B m                | ●                                                                                 | -                                                                                 | -                                                                                 | -                                                                                 | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | d B m                | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   |
| Conductance          | ●                                                                                 | ●                                                                                 | -                                                                                 | ●                                                                                 | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | Conductance          | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   |
| EF detection         | -                                                                                 | ●                                                                                 | -                                                                                 | -                                                                                 | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | EF detection         | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | ●                                                                                   | -                                                                                   |
| Auto power off/save  | Save                                                                              | Save                                                                              | Save                                                                              | Save                                                                              | Off                                                                                 | -                                                                                   | Save                                                                                | Off                                                                                 | Off                                                                                 | Auto power off/save  | Off                                                                                 | Save                                                                                | Off                                                                                 | Off                                                                                 | Off                                                                                 | Off                                                                                 | Off                                                                                 | Off                                                                                 | Off                                                                                 |
| Battery check        | -                                                                                 | -                                                                                 | -                                                                                 | -                                                                                 | -                                                                                   | -                                                                                   | -                                                                                   | 1.5V                                                                                | -                                                                                   | Battery check        | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   |
| Data hold            | ●                                                                                 | ●                                                                                 | ●                                                                                 | ●                                                                                 | ●                                                                                   | ●                                                                                   | ●                                                                                   | ●                                                                                   | ●                                                                                   | Data hold            | ●                                                                                   | ●                                                                                   | ●                                                                                   | ●                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | ●                                                                                   | ●                                                                                   |
| Range hold           | ●                                                                                 | ●                                                                                 | ●                                                                                 | ●                                                                                 | ●                                                                                   | ●                                                                                   | ●                                                                                   | ●                                                                                   | ●                                                                                   | Range hold           | ●                                                                                   | ●                                                                                   | ●                                                                                   | -                                                                                   | -                                                                                   | ●                                                                                   | ●                                                                                   | -                                                                                   | ●                                                                                   |
| Peak hold            | ●                                                                                 | ●                                                                                 | -                                                                                 | ●                                                                                 | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | Peak hold            | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   |
| Relative value       | ●                                                                                 | ●                                                                                 | ●                                                                                 | ●                                                                                 | ●                                                                                   | -                                                                                   | ●                                                                                   | ●                                                                                   | ●                                                                                   | Relative value       | ●                                                                                   | -                                                                                   | ●                                                                                   | ●                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | ●                                                                                   |
| 4-20mA%              | ●                                                                                 | -                                                                                 | -                                                                                 | -                                                                                 | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | 4-20mA%              | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   |
| AC+DC                | ●                                                                                 | -                                                                                 | -                                                                                 | ●                                                                                 | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | AC+DC                | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   |
| Data logging         | -                                                                                 | -                                                                                 | -                                                                                 | ●                                                                                 | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | Data logging         | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   |
| Bar graph            | ●                                                                                 | ●                                                                                 | ●                                                                                 | ●                                                                                 | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | Bar graph            | -                                                                                   | ●                                                                                   | -                                                                                   | -                                                                                   | ●                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   |
| Max/Min              | ●                                                                                 | ●                                                                                 | -                                                                                 | ●                                                                                 | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | Max/Min              | MAX                                                                                 | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | ●                                                                                   |
| PC link              | ●                                                                                 | ●                                                                                 | ●                                                                                 | ●                                                                                 | ●                                                                                   | ●                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | PC link              | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   |
| Optional AC adapter  | -                                                                                 | -                                                                                 | -                                                                                 | -                                                                                 | -                                                                                   | ●                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | Optional AC adapter  | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   | -                                                                                   |
| Dimension H (mm)     | 184                                                                               | 184                                                                               | 184                                                                               | 184                                                                               | 166                                                                                 | 167                                                                                 | 166                                                                                 | 166                                                                                 | 166                                                                                 | Dimension H (mm)     | 179                                                                                 | 167                                                                                 | 176                                                                                 | 108                                                                                 | 117                                                                                 | 115                                                                                 | 115                                                                                 | 130                                                                                 | 130                                                                                 |
| Dimension W (mm)     | 86                                                                                | 86                                                                                | 86                                                                                | 86                                                                                | 82                                                                                  | 90                                                                                  | 82                                                                                  | 82                                                                                  | 82                                                                                  | Dimension W (mm)     | 87                                                                                  | 90                                                                                  | 104                                                                                 | 56                                                                                  | 76                                                                                  | 57                                                                                  | 57                                                                                  | 90                                                                                  | 75                                                                                  |
| Dimension D (mm)     | 52                                                                                | 52                                                                                | 52                                                                                | 52                                                                                | 44                                                                                  | 48                                                                                  | 44                                                                                  | 44                                                                                  | 44                                                                                  | Dimension D (mm)     | 55                                                                                  | 48                                                                                  | 46                                                                                  | 11.5                                                                                | 18                                                                                  | 18                                                                                  | 18                                                                                  | 30                                                                                  | 19.9                                                                                |
| Mass (g)             | 430                                                                               | 430                                                                               | 430                                                                               | 430                                                                               | 360                                                                                 | 330                                                                                 | 360                                                                                 | 360                                                                                 | 340                                                                                 | Mass (g)             | 460                                                                                 | 320                                                                                 | 340                                                                                 | 50                                                                                  | 117                                                                                 | 85                                                                                  | 85                                                                                  | 205                                                                                 | 160                                                                                 |