
















# Selection guide of Insulation Testers

| MODEL                                      | Analogue Insuration / Continuity Testers  |   |   | Analogue Insuration Testers   |                                     |                                    |                                    |
|--|---|---|---|---|-------------------------------------|------------------------------------|------------------------------------|
|  | 3111V   | 3131A   | 3132A   | 3144A   | 3145A                               | 3146A                              | 3161A                              |
| Appearance                                 |  |  |  |  photo:3144A |                                     |                                    |                                    |
| Range                                      | 3 ranges  | 3 ranges  | 3 ranges  | 1 range   | 1 range                             | 1 range                            | 1 range                            |
| Rated voltage (Max. effective scale value) | 250V (100MΩ)<br>500V (200MΩ)<br>1000V (400MΩ)                                     | 250V (100MΩ)<br>500V (200MΩ)<br>1000V (400MΩ)                                     | 250V (100MΩ)<br>500V (200MΩ)<br>1000V (400MΩ)                                     | 250V (50MΩ)<br>500V (100MΩ)   | 125V (20MΩ)<br>250V (50MΩ)          | 50V (10MΩ)<br>125V (20MΩ)          | 15V (20MΩ)<br>500V (100MΩ)         |
| Effective measuring ranges                 | 0.05~10MΩ (250V)<br>0.1~20MΩ (500V)<br>0.2~40MΩ (1000V)                           | 0.1~10MΩ (250V)<br>0.2~20MΩ (500V)<br>0.4~40MΩ (1000V)                            | 0.1~10MΩ (250V)<br>0.2~20MΩ (500V)<br>0.4~40MΩ (1000V)                            | 0.05~20MΩ (250V)<br>0.1~50MΩ (500V)   | 0.02~10MΩ (125V)<br>0.5~20MΩ (250V) | 0.01~5MΩ (50V)<br>0.02~10MΩ (125V) | 0.005~2MΩ (15V)<br>0.1~50MΩ (500V) |
| Continuity ranges                          | 50Ω   | 2/20Ω   | 3/500Ω  |   |                                     |                                    |                                    |
| AC Voltage range                           |   |   | 600V  | 600V  | 300V                                | 300V                               | 600V                               |
| Power source                               | R6P(AA) x 8   | R6P(AA) x 6   | R6P(AA) x 6   | R6P(AA) x 4   | R6P(AA) x 4                         | R6P(AA) x 4                        | R6P(AA) x 4                        |
| Dimensions (L)x(W)x(D)mm                   | 143 x 93 x 63   | 185 x 167 x 89  | 106 x 160 x 72  | 90 x 137 x 40   | 90 x 137 x 40                       | 90 x 137 x 40                      | 90 x 137 x 40                      |
| Weight (Aoorox.)                           | 500g  | 860g  | 560g  | 340g  | 340g                                | 340g                               | 340g                               |

| MODEL                                      | Analogue Insuration Testers  |                |  |   |  |   |  |
|--|--|----------------|--|---|--|---|--|
|  | 3165   | 3166           | 3321A  | 3322A   | 3323A  | 3315  | 3316   |
| Appearance                                 |  photo:3165 |                |  |  photo:3321A |  |   |  photo:3315 |
| Range                                      | 1 range  | 1 range        | 3 ranges   | 3 ranges  | 3 ranges   | 4 ranges  | 4 ranges   |
| Rated voltage (Max. effective scale value) | 500V (1000MΩ)  | 1000V (2000MΩ) | 250V (50MΩ)<br>500V (100MΩ)<br>1000V (2000MΩ)          | 125V (20MΩ)<br>250V (50MΩ)<br>500V (100MΩ)  | 25V (10MΩ)<br>50V (10MΩ)<br>100V (20MΩ)              | 125V (20MΩ)<br>250V (50MΩ)<br>500V (100MΩ)<br>1000V (2000MΩ)                | 50V (10MΩ)<br>125V (20MΩ)<br>250V (50MΩ)<br>500V (100MΩ)                                       |
| Effective measuring ranges                 | 1~500MΩ  | 2~1000MΩ       | 0.05~20MΩ (50V)<br>0.1~50MΩ (500V)<br>2~1000MΩ (1000V) | 0.02~10MΩ (125V)<br>0.05~20MΩ (250V)<br>0.1~50MΩ (500V)                                       | 0.01~5MΩ (25V)<br>0.01~5MΩ (50V)<br>0.02~10MΩ (100V) | 0.02~10MΩ (125V)<br>0.05~20MΩ (250V)<br>0.1~50MΩ (500V)<br>2~1000MΩ (1000V) | 0.01~5MΩ (50V)<br>0.02~10MΩ (125V)<br>0.05~20MΩ (250V)<br>0.05~20MΩ (250V)<br>0.01~50MΩ (500V) |
| AC Voltage range                           | 600V   | 600V           | 600V   | 600V  | 600V   | 600V  | 600V   |
| Power source                               | R6P(AA) x 4  | R6P(AA) x 4    | R6P(AA) x 6  | R6P(AA) x 6   | R6P(AA) x 6  | R6P(AA) x 6   | R6P(AA) x 6  |
| Dimensions (L)x(W)x(D)mm                   | 90 x 137 x 40  | 90 x 137 x 40  | 105 x 158 x 70   | 105 x 158 x 70  | 105 x 158 x 70                                       | 105 x 158 x 70  | 105 x 158 x 70   |
| Weight (Aoorox.)                           | 330g   | 330g           | 520g   | 520g  | 520g   | 340g  | 340g   |

| MODEL                                      | Digital Insuration / Continuity Testers   |   |   |  |  |  |
|--|---|---|---|--|--|--|
|  | 3001B   | 3005A   | 3007A   | 3021   | 3022   | 3023   |
| Appearance                                 |  |  |  |  |  photo:3021 |  |
| Range                                      | 2 ranges  | 3 ranges  | 3 ranges  | 4 ranges   | 4 ranges   | 4 ranges   |
| Rated voltage (Max. effective scale value) | 500V (200MΩ)<br>1000V (200MΩ)   | 250V (20MΩ)<br>500V (200MΩ)<br>1000V (2000MΩ)                                       | 250V (20MΩ)<br>500V (200MΩ)<br>1000V (2000MΩ)                                       | 125V (200MΩ)<br>250V (2000MΩ)<br>500V (2000MΩ)<br>1000V (2000MΩ)             | 50V (200MΩ)<br>100V (200MΩ)<br>250V (2000MΩ)<br>500V (2000MΩ)                                    | 100V (200MΩ)<br>250V (2000MΩ)<br>500V (2000MΩ)<br>1000V (2000MΩ)             |
| Effective measuring ranges                 | 0~200MΩ (500/1000V)   | 20/200/2000MΩ (250/500/1000V)   | 20/200/2000MΩ (250/500/1000V)   | 0.1~20MΩ (125V)<br>0.1~40MΩ (250V)<br>0.1~200MΩ (500V)<br>0.1~1000MΩ (1000V) | 0.1~20MΩ (50V)<br>0.1~20MΩ (100V)<br>0.1~40MΩ (250V)<br>0.1~200MΩ (500V)                         | 0.1~20MΩ (100V)<br>0.1~40MΩ (250V)<br>0.1~200MΩ (500V)<br>0.1~1000MΩ (1000V) |
| Continuity ranges                          | 200Ω  | 20/200/2000Ω  | 20/200/2000Ω  | 40/400Ω  | 40/400Ω  | 40/400Ω  |
| AC Voltage range                           | -   | 600V  | 600V  | AC 20~600V<br>DC -20~-600V/20~-600V  | AC 20~600V<br>DC -20~-600V/20~-600V  | AC 20~600V<br>DC -20~-600V/20~-600V  |
| Power source                               | R6P(AA) x 8   | R6P(AA) x 8   | R6P(AA) x 8   | R6P(AA) x 6  | R6P(AA) x 6  | R6P(AA) x 6  |
| Dimensions (L)x(W)x(D)mm                   | 144 x 93 x 61   | 185 x 167 x 89  | 185 x 167 x 89  | 105 x 158 x 70   | 105 x 158 x 70   | 105 x 158 x 70   |
| Weight (Aoorox.)                           | 460g  | 970g  | 990g  | 600g   | 600g   | 600g   |

| MODEL                                      | Analogue High Voltage Insulation Testers |  |   |  | Digital High Voltage Insulation Testers   |   |
|--|--|--|---|--|---|---|
|  | 3121                                     | 3122   | 3123                                    | 3124   | 3125  | 3128  |
| Appearance                                 |  |  photo:3123 |   |  |  |                      |
| Range                                      | 1 range                                  | 1 range  | 2 ranges                                | 2 ranges   | 4 ranges  | 6 ranges  |
| Rated voltage (Max. effective scale value) | 2500V (2/100GΩ)                          | 5000V (5/200GΩ)  | 5000V (5/200GΩ)<br>10000V (10/400GΩ)    | 1k~10kV (100GΩ)<br>1000V (100MΩ)   | 500V (999MΩ)<br>1000V (1.99GΩ)<br>2500V (99.9GΩ)<br>5000V (1TΩ)                       | 500V (500GΩ)<br>1000V (1TΩ)<br>2500V (2.5TΩ)<br>5000V (5TΩ)<br>10000V (35TΩ)<br>12000V (35TΩ)             |
| Effective measuring ranges                 | 0.1~50GΩ                                 | 0.2~100GΩ  | 0.2~100GΩ (5000V)<br>0.4~200GΩ (10000V) | 0.05~50GΩ (1k^10kV)<br>1~100MΩ (1000V)   | 0~999MΩ (500V)<br>0~1.99GΩ (1000V)<br>0~99.9GΩ (2500V)<br>0~1TΩ (5000V)               | 0~500GΩ (500V)<br>0~1TΩ (1000V)<br>0~2.5TΩ (2500V)<br>0~5TΩ (5000V)<br>0~35TΩ (10000V)<br>0~35TΩ (12000V) |
| AC Voltage range                           | -  | -  | -                                       | -  | 30~600V AC/DC   | 30~600V AC/DC   |
| Current                                    | -  | -  | -                                       | -  | -   | 5.0nA~2.40mA  |
| Capacitance                                | -  | -  | -                                       | -  | -   | 5.0nF~5.0μA   |
| Power source                               | R6P(AA) x 8                              | R6P(AA) x 8  | R6P(AA) x 8                             | Ni-Cd rechargeable battery(1.2V) x 8   | R14(DC12V) x 8  | Rechargeable lead storage battery (12V)   |
| Dimensions (L)x(W)x(D)mm                   | 200 x 140 x 80                           | 200 x 140 x 80   | 200 x 140 x 80                          | 200 x 140 x 80   | 205 x 152 x 94  | 330 x 410 x 180<br>*Instrument and Hard case  |
| Weight (Aoorox.)                           | 1000g                                    | 1000g  | 1000g                                   | 1500g  | 1800g   | 9000g   |