

# **MOTORIZED VERTICAL TEST STAND CODE ISF-RV61**



- For digital force gages (code ISF-1DF□□□ and ISF-DF□□□)
- Push and pull test
- Automatic and manual test
- Programmable automatic operation (automatic cycle)
- Four operation modes: displacement cycle (D cycle), force cycle (F cycle), demo (teaching & playback) mode and positioning mode
- Alarm indications: stroke overrange alarm, force overrange alarm, motor block alarm



### **SPECIFICATION**

| Load capacity   | 650N (250lbf, 65kg) |  |
|---|---------------------|--|
| Max. travel   | 220mm               |  |
| Resolution of displacement                                | 0.01mm              |  |
| Accuracy of displacement                                  | ±0.3mm              |  |
| Range of adjustable speed                                 | 30~720mm/min        |  |
| Resolution of speed                                       | 1mm/min             |  |
| Accuracy of speed   | ±2%                 |  |
| Data output USB, RS232                                    |                     |  |
| Work temperature and relative humidity 10~40°C, 10%~80%RH |                     |  |
| Power supply  | 100~230V            |  |
| Dimension   | 340×180×630mm       |  |
| Weight  | 15.5kg              |  |

# STANDARD DELIVERY

| Test stand                  | 1 pc |
|-----------------------------|------|
| AC/DC adapter               | 1 pc |
| MD8 cable (for force gages) | 1 pc |
| Software and USB cable      | 1 pc |

# MOTORIZED HORIZONTAL TEST STAND **CODE ISF-RH62**



- Push and pull test
- Automatic and manual test
- Programmable automatic operation (automatic cycle)
   Four operation modes: displacement cycle (D cycle), force cycle (F cycle), demo (teaching & playback) mode and positioning mode
- Alarm indications: stroke overrange alarm, force overrange alarm, motor block alarm

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| Resolution of displacement             | 0.01mm              |  |  |
| Accuracy of displacement               | ±0.3mm              |  |  |
| Range of adjustable speed              | 30~720mm/min        |  |  |
| Resolution of speed                    | 1mm/min             |  |  |
| Accuracy of speed ±2%                  |                     |  |  |
| Data output USB, RS232                 |                     |  |  |
| Work temperature and relative humidity | 10~40°C, 10%~80%RH  |  |  |
| Power supply                           | 100~230V            |  |  |
| Dimension                              | 671×120×278mm       |  |  |
| Weight                                 | 13kg                |  |  |

digital force gage is optional



## STANDARD DELIVERY

| OTANDARD DELIVERY           |      |  |
|-----------------------------|------|--|
| Test stand                  | 1 pc |  |
| AC/DC adapter               | 1 pc |  |
| MD8 cable (for force gages) | 1 pc |  |
| Software and USB cable      | 1 pc |  |







# **DIGITAL SPRING TESTERS**

- Peak hold and automatic release function
- Set upper and lower limits, red and green indicator and buzzer alarm
   Automatic conversion of three units: N, kgf, lbf
- Built in printer
- Automatic power off



# **SPECIFICATION**

| Code                          | ISF-S10          | ISF-S20       | ISF-S30       | ISF-S50       | ISF-S100      | ISF-S200      |
|-------------------------------|------------------|---------------|---------------|---------------|---------------|---------------|
| Maximum load                  | 10N              | 20N           | 30N           | 50N           | 100N          | 200N          |
| Resolution                    | 0.001N           | 0.002N        | 0.01N         | 0.01N         | 0.02N         | 0.05N         |
| Range of digital scale        | 65mm             | 65mm          | 65mm          | 95mm          | 95mm          | 95mm          |
| Resolution of digital scale   | 0.01mm           | 0.01mm        | 0.01mm        | 0.01mm        | 0.01mm        | 0.01mm        |
| Disk diameter                 | Ø30mm            | Ø30mm         | Ø30mm         | Ø49mm         | Ø49mm         | Ø49mm         |
| Maximum free length of spring | 65mm             | 65mm          | 65mm          | 95mm          | 95mm          | 95mm          |
| Measuring range of force      |                  |               |               |               |               |               |
| Accuracy of force             | ±1% (maximum loa | ad)           |               |               |               |               |
| Data output                   | RS232            |               |               |               |               |               |
| Power supply                  | 220V,50/60Hz     |               |               |               |               |               |
| Dimension                     | 300×235×600mm    | 300×235×600mm | 300×235×600mm | 300×235×620mm | 300×235×620mm | 300×235×620mm |
| Weight                        | 13.2kg           | 13.2kg        | 13.2kg        | 17.3kg        | 19.1kg        | 19.1kg        |

| Code                          | ISF-S300               | ISF-S500      | ISF-S1000     | ISF-S2000     | ISF-S5000     |  |
|-------------------------------|------------------------|---------------|---------------|---------------|---------------|--|
| Maximum load                  | 300N                   | 500N          | 1000N         | 2000N         | 5000N         |  |
| Resolution                    | 0.1N                   | 0.1N          | 0.2N          | 0.5N          | 1N            |  |
| Range of digital scale        | 95mm                   | 95mm          | 150mm         | 150mm         | 150mm         |  |
| Resolution of digital scale   | 0.01mm                 | 0.01mm        | 0.01mm        | 0.01mm        | 0.01mm        |  |
| Disk diameter                 | Ø49mm                  | Ø49mm         | Ø108mm        | Ø108mm        | Ø108mm        |  |
| Maximum free length of spring | 95mm                   | 95mm          | 200mm         | 200mm         | 200mm         |  |
| Measuring range of force      | 5%~100% (maximum load) |               |               |               |               |  |
| Accuracy of force             | ±1% (maximum load)     |               |               |               |               |  |
| Data output                   | R\$232                 |               |               |               |               |  |
| Power supply                  | 220V, 50/60Hz          |               |               |               |               |  |
| Dimension                     | 300×235×620mm          | 300×235×620mm | 490×300×920mm | 490×300×920mm | 490×300×920mm |  |
| Weight                        | 19.1kg                 | 20.8kg        | 47.5kg        | 47.5kg        | 47.5kg        |  |

## STANDARD DELIVERY

| Main unit | 1 pc |
|-----------|------|



# **SEMI-AUTOMATIC IMPACT TESTING MACHINE CODE ITM-S300J**







300J pendulum (included)



span aligner (included)



specimen center aligner (included)

- According to ISO148
   For testing the anti-impact performance of metal materials under dynamic load
- High-precision bearings, small bearing friction, the impact absorption rate of empty pendulum is less than 0.3%
   Alloy steel impact blade, hardness HRC60
   PLC controller with built-in energy loss correction program

- Supplied with safety cover
- Supplied with software for data storage, automatic processing, etc.
- Data can be stored in Excel format, output and printed

# software (included)

# **SPECIFICATION**

| Impact energy  | 300J            | 150J         |  |
|--|-----------------|--------------|--|
| Dial range   | 0~300J          | 0~150J       |  |
| Dial graduation  | 2J 1J           |              |  |
| Pendulum moment  | M=160.7695N.m   | M=80.3848N.m |  |
| Pendulum preparing angle                                   | 150°            |              |  |
| Distance between pendulum shaft center and specimen center | 750mm           |              |  |
| Impact speed   | 5.2m/s          |              |  |
| Span of specimen seat                                      | 40mm            |              |  |
| End face radius of specimen seat                           | R1.0~1.5mm      |              |  |
| Radius of impact blade                                     | R2.0~2.5mm      |              |  |
| Inclination angle of support surface of specimen seat      | 11°             |              |  |
| Angle of impact blade                                      | 30°             |              |  |
| Thickness of impact blade                                  | 16mm            |              |  |
| Range of measuring angle                                   | 0~360°          |              |  |
| Angle resolution   | ≤0.06°          |              |  |
| Specimen size  | 10x10x55mm      |              |  |
| Base size  | 800x500mm       |              |  |
| Power supply   | AC 380V, 50Hz   |              |  |
| Power  | 400W            |              |  |
| Dimension of main body                                     | 2150x640x1400mm |              |  |
| Weight   | 420kg           |              |  |

## STANDARD DELIVERY

| Main unit               | 1 pc  |
|-------------------------|-------|
| 150J pendulum           | 1 pc  |
| 300J pendulum           | 1 pc  |
| Span aligner            | 1 pc  |
| Specimen center aligner | 1 pc  |
| Safety cover            | 1 set |
| Computer                | 1 set |
| Software                | 1 set |
| Printer                 | 1 pc  |

## **OPTIONAL ACCESSORY**

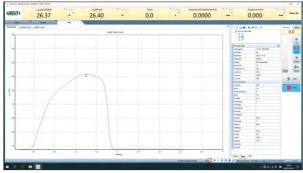
| Workbench | 7911-15 |
|-----------|---------|
|-----------|---------|

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# **ELECTRONIC UNIVERSAL TESTING MACHINES**





■ For tensile, peel, tear tests of metal and non-metal materials





UTM-S5KA

## STANDARD DELIVERY

| Main unit          | 1 pc  |
|--------------------|-------|
| Control box        | 1 pc  |
| Computer           | 1 pc  |
| Measuring software | 1 pc  |
| Printer            | 1 pc  |
| Tensile fixture    | 1 set |

OPTIONAL ACCESSORY
Extensometer

| Code                                     | UTM-S200A  | UTM-S500A           | UTM-S1KA             | UTM-S2KA | UTM-S5KA |  |  |
|--|--|---------------------|----------------------|----------|----------|--|--|
| Max. test force                          | 200N   | 500N                | 1kN                  | 2kN      | 5kN      |  |  |
| Accuracy class                           | 0.5 class  |                     |                      |          |          |  |  |
| Test force measurement range             | 0.4%~100%FS  |                     |                      |          |          |  |  |
| Test force measurement accuracy          | ±0.5% of indica  | ting value          |                      |          |          |  |  |
| Resolution of test force measurement     | 1/300000 of Ma   | x. test force (same | e resolution all the | way)     |          |  |  |
| Deformation measurement range            | 0.2%~100%FS  |                     |                      |          |          |  |  |
| Deformation measurement accuracy         | ±0.5% of indica  | ting value          |                      |          |          |  |  |
| Deformation measurement resolution       | 1/200000 of Ma   | x. deformation, up  | to 1/300000          |          |          |  |  |
| Large deformation measurement range      | 10~800mm   |                     |                      |          |          |  |  |
| Large deformation measurement accuracy   | ±1% of indicating  | ig value            |                      |          |          |  |  |
| Large deformation measurement resolution | 8µm  |                     |                      |          |          |  |  |
| Displacement accuracy                    | ±0.5% of indica  | ting value          |                      |          |          |  |  |
| Displacement resolution                  | 0.01mm   | 0.01mm              |                      |          |          |  |  |
| Force control speed adjustment range     | 0.005~5%FS/s   |                     |                      |          |          |  |  |
| Force control speed control accuracy     | ±2% of the set value (speed<0.05%FS/s)<br>±0.5% of the set value (speed≥0.05%FS/s) |                     |                      |          |          |  |  |
| Deformation speed adjustment range       | 0.005~5%FS/s   |                     |                      |          |          |  |  |
| Deformation speed control accuracy       | ±2% of the set value (speed<0.05%FS/s)<br>±0.5% of the set value (speed≥0.05%FS/s) |                     |                      |          |          |  |  |
| Beam displacement speed adjustment range | 0.001~500mm/min  |                     |                      |          |          |  |  |
| Beam displacement speed control accuracy | ±1% of the set value (speed<0.5mm/min)<br>±0.2% of the set value (speed≥0.5mm/min) |                     |                      |          |          |  |  |
| Crosshead travel*                        | 900mm  |                     |                      |          |          |  |  |
| Effective compression travel*            | 630mm  |                     |                      |          |          |  |  |
| Power supply                             | 220V, 50Hz, 0.4kW~1kW  |                     |                      |          |          |  |  |
| Demension                                | 510×510×1580mm   |                     |                      |          |          |  |  |
| Weight                                   | 150kg  |                     |                      |          |          |  |  |

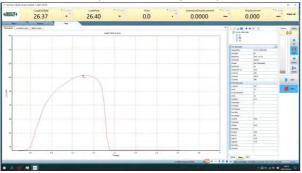
<sup>\*</sup>Can be customized according to test requirements

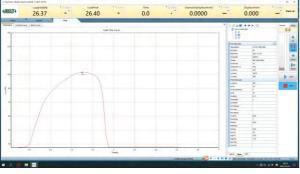


# **ELECTRONIC UNIVERSAL TESTING MACHINES**

■ For tensile, compression, bend, shear, peel, tear tests of metal and non-metal materials

computer and software (included)





flat jaws (included)







tensile fixture

control box compression

UTM-E50

# STANDARD DELIVERY

| Main unit  | 1 pc  |
|--|-------|
| Control box  | 1 pc  |
| Computer   | 1 pc  |
| Measuring software   | 1 pc  |
| Printer  | 1 pc  |
| Wedge tension fixture<br>(including flat jaws and V-shaped jaws) | 1 set |
| Compression fixture  | 1 set |
| Extensometer (only for UTM-E100, UTM-E300)                       | 1 pc  |

# **OPTIONAL ACCESSORY** Extensometer

| SPECIFICATION                            |  | I  |                     |                 |  |
|--|--|--|---------------------|-----------------|--|
| Code                                     | UTM-E10  | UTM-E50                                  | UTM-E100            | UTM-E300        |  |
| Max. test force                          | 10kN   | 50kN                                     | 100kN               | 300kN           |  |
| Accuracy class                           | 0.5 class  |  |                     |                 |  |
| Test force measurement range             | 0.2%~100%FS  |  |                     |                 |  |
| Test force measurement accuracy          | ±0.5% of indicating va   | alue                                     |                     |                 |  |
| Resolution of test force measurement     | 1/300000 of Max. test  | t force (same resolution                 | all the way)        |                 |  |
| Deformation measurement range            | 0.2%~100%FS  |  |                     |                 |  |
| Deformation measurement accuracy         | ±0.5% of indicating va   | alue                                     |                     |                 |  |
| Deformation measurement resolution       | 1/200000 of Max. def   | ormation, up to 1/30000                  | 00                  |                 |  |
| Large deformation measurement range      | 10~800mm   |  |                     |                 |  |
| Large deformation measurement accuracy   | ±1% of indicating valu   | ıe                                       |                     |                 |  |
| Large deformation measurement resolution | 8µm  |  |                     |                 |  |
| Displacement accuracy                    | ±0.5% of indicating va   | alue                                     |                     |                 |  |
| Displacement resolution                  | 0.01mm   |  |                     |                 |  |
| Force control speed adjustment range     | 0.005~5%FS/s   |  |                     |                 |  |
| Force control speed control accuracy     | ±2% of the set value (speed<0.05%FS/s)<br>±0.5% of the set value (speed≥0.05%FS/s) |  |                     |                 |  |
| Deformation speed adjustment range       | 0.005~5%FS/s   |  |                     |                 |  |
| Deformation speed control accuracy       | ±2% of the set value (<br>±0.5% of the set value)                                  | (speed<0.05%FS/s)<br>e (speed≥0.05%FS/s) |                     |                 |  |
| Beam displacement speed adjustment range | 0.001~500mm/min  |  |                     |                 |  |
| Beam displacement speed control accuracy | ±1% of the set value (<br>±0.2% of the set value)                                  |  |                     |                 |  |
| Crosshead travel*                        | 1030mm   | 970mm                                    | 1250mm              | 1000mm          |  |
| Effective compression travel*            | 800mm  | 700mm                                    | 700mm               | 600mm           |  |
| Horizontal test space*                   | 400mm  | 440mm                                    | 600mm               | 550mm           |  |
| Power supply                             | 220V, 50Hz, 0.4kW~1  | kW                                       | 380V, 50Hz, 2kW~5k\ | W               |  |
| Demension                                | 715×500×1680mm   | 820×620×1880mm                           | 1070×855×2180mm     | 1070×920×2550mm |  |
| Weight                                   | 230kg  | 350kg                                    | 1000kg              | 1500kg          |  |

<sup>\*</sup>Can be customized according to test requirements





# **HYDRAULIC UNIVERSAL TESTING MACHINES**



UTM-H300B

■ For tensile, compression, bend, shear tests of metal and non-metal materials

# **SPECIFICATION**

|   | UTM-H300B  | UTM-H600B  | UTM-H1000B           | UTM-H2000B                     | UTM-H3000B                              |  |  |
|---|--|--|----------------------|--------------------------------|---|--|--|
|   | 300kN  | 600kN  | 1000kN               | 2000kN                         | 3000kN                                  |  |  |
|   | ±1%  | ±1%  |                      |                                |   |  |  |
| ent range                                       | 2%~100%FS  |  |                      |                                |   |  |  |
| rce measurement                                 | 1/300000 of Max  | . test force (same   | resolution all the w | /ay)                           |   |  |  |
| ement device                                    | extensoment  |  |                      |                                |   |  |  |
| ement range                                     | 1%~100%FS  |  |                      |                                |   |  |  |
| ement accuracy                                  | ±1%  |  |                      |                                |   |  |  |
| ement resolution                                | 1/300000   |  |                      |                                |   |  |  |
| асу   | ±1%  |  |                      |                                |   |  |  |
| tion  | 0.01mm   |  |                      |                                |   |  |  |
|   | 200mm  |  |                      |                                |   |  |  |
| ncluding piston stroke)                         | 600mm  | 600mm  | 680mm                | 600mm                          | 900mm                                   |  |  |
| Max compression space (including piston stroke) |  | 500mm  | 560mm                | 500mm                          | 800mm                                   |  |  |
|   | chain drive  |  |                      |                                |   |  |  |
| vice  | software protection and mechanical limit protection          |  |                      |                                |   |  |  |
|   | special software, closed-loop of stress, strain and velocity |  |                      |                                |   |  |  |
| ound sample                                     | Ø10~32mm   | Ø13~40mm   | Ø13~60mm             | Ø20~70mm                       | Ø25~80mm                                |  |  |
| at sample                                       | 0~15mm   | 0~15mm*  | 0~20mm**             | 0~40mm                         | 0~80mm                                  |  |  |
|   | Ø188mm   | Ø188mm   | Ø208mm               | Ø208mm                         | Ø208mm                                  |  |  |
| width   | 140mm  |  |                      |                                |   |  |  |
|   | 2.5kW  | 3.0kW  | 3.0kW                | 3.75kW                         | 5.5kW                                   |  |  |
|   | 380V, 50Hz   |  |                      |                                |   |  |  |
| Host  | 800×620×1900   | 820×650×2000   | 940×780×2250         | 1100×760×3000                  | 1250×930×3550                           |  |  |
| Oil source                                      | 1140×600×855   |  |                      |                                |   |  |  |
|   | 2T   | 2.2T   | 3T                   | 7.5T                           | 12.6T                                   |  |  |
|   | vice  ound sample at sample ssure plate size width  Host     | 300kN   ±1%   2%~100%FS   rce measurement   1/300000 of Max   ement device   extensoment   ement range   1%~100%FS   ement accuracy   ±1%   ement resolution   1/300000   etcy   ±1%   etion   200mm   etcy   ±1%   etion   200mm   etcy   etion   etcy   etconomic   etcy   etconomic   etconomic | 300kN                | 300kN   600kN   1000kN     ±1% | 300kN   600kN   1000kN   2000kN     ±1% |  |  |

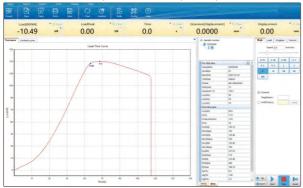
<sup>\*</sup>Customizable 0~30mm \*\*Customizable 0~40mm

To be continued



## Continued from previous page

computer and software (included)



## STANDARD DELIVERY

| Main unit                          | 1 pc  |
|------------------------------------|-------|
| Electro hydraulic servo oil source | 1 pc  |
| Electro hydraulic servo valve      | 1 pc  |
| High pressure oil pump             | 1 pc  |
| Oil pressure sensor                | 1 pc  |
| Control box                        | 1 pc  |
| Extensometer                       | 1 pc  |
| Computer                           | 1 pc  |
| Measuring software                 | 1 set |
| Printer                            | 1 pc  |
| Tensile fixture                    | 1 set |
| Compression fixture                | 1 set |



acrylic safety shield (optional)



steel wire safety shield (optional)

# **OPTIONAL ACCESSORY**

| Acrylic safety shield    | UTM-H-COVER1 |  |  |
|--------------------------|--------------|--|--|
| Steel wire safety shield | UTM-H-COVER2 |  |  |

# **EXTENSOMETERS**

■ Used with universal testing machines

| Code         | Gage length Deformation                                   |      |  |
|--------------|---|------|--|
| UTM-EX25-5   | 25mm  | 5mm  |  |
| UTM-EX25-10  | 25mm  | 10mm |  |
| UTM-EX25-25  | 25mm  | 25mm |  |
| UTM-EX50-5   | 50mm  | 5mm  |  |
| UTM-EX50-10  | 50mm  | 10mm |  |
| UTM-EX50-25  | 50mm  | 25mm |  |
| UTM-EX100-5  | 100mm   | 5mm  |  |
| UTM-EX100-10 | 100mm   | 10mm |  |
| UTM-EX100-25 | 100mm 25mm  |      |  |
| UTM-EX200-5  | 200mm   | 5mm  |  |
| UTM-EX200-10 | 200mm   | 10mm |  |
| UTM-EX200-25 | 200mm   | 25mm |  |
| UTM-EX-B     | large deformation, customized according to the workpieces |      |  |



UTM-EX50-10





# **DIAL TENSION GAGES**



- Clockwise and counter-clockwise use
- For electronic and precision mechanical industry, such as test the contact pressure of relay, adjust the tension or compression of spring

## **SPECIFICATION (Unit: N)**

| Code              | ISF-TGD1         | ISF-TGD3 | ISF-TGD5 | ISF-TG1 | ISF-TG1D5 | ISF-TG3 | ISF-TG5 |
|-------------------|------------------|----------|----------|---------|-----------|---------|---------|
| Range (N)         | 0.01~0.1         | 0.03~0.3 | 0.05~0.5 | 0.1~1   | 0.15~1.5  | 0.3~3   | 0.5~5   |
| Graduation (N)    | 0.002            | 0.005    | 0.01     | 0.02    | 0.025     | 0.05    | 0.1     |
| Accuracy          | ±2% (full scale) |          |          |         |           |         |         |
| Dimension (L×W×H) | 90×47×19mm       |          |          |         |           |         |         |
| Weight            | 60g              |          |          |         |           |         |         |

## SPECIFICATION (Unit: gf)

| Code              | ISF-TG10        | ISF-TG30         | ISF-TG50 | ISF-TG100 | ISF-TG150 | ISF-TG300 | ISF-TG500 |
|-------------------|-----------------|------------------|----------|-----------|-----------|-----------|-----------|
| Range (gf)        | 1~10            | 3~30             | 5~50     | 10~100    | 15~150    | 30~300    | 50~500    |
| Graduation (gf)   | 0.2             | 0.5              | 1        | 2         | 2.5       | 5         | 10        |
| Accuracy          | ±2% (full scale | ±2% (full scale) |          |           |           |           |           |
| Dimension (L×W×H) | 90×47×19mm      | 90×47×19mm       |          |           |           |           |           |
| Weight            | 60g             | 30g              |          |           |           |           |           |

ATTENTION: NOT SUITABLE FOR ELECTRIC WRENCHES, **IMPACT WRENCHES OR PNEUMATIC WRENCHES** 

# **DIGITAL TORQUE TESTERS**







- Test torque wrenches, torque screwdrivers and other torque tools ■ Clockwise operation
- Peak, track and first peak working modes
- Tolerance testing
- LED indicator for target torque alarm:
  - Green LED light on when the value is within tolerance;
  - Red LED light on when the value is above the high tolerance
- Power off automatically in 2 minutes without any operations



IST-04TT815 type B

## STANDARD DELIVERY

| Main unit     | 1 pc |
|---------------|------|
| AC/DC adapter | 1 pc |

| SPECIFICATION            |                 |                          |            |             |             |              |              |  |
|--------------------------|-----------------|--------------------------|------------|-------------|-------------|--------------|--------------|--|
| Code                     | IST-04TT5       | IST-04TT28               | IST-04TT68 | IST-04TT350 | IST-04TT815 | IST-04TT1000 | IST-04TT2000 |  |
| Туре                     | Α               | A                        |            |             |             | В            |              |  |
| Range                    | 0.5~5N.m        | 2.8~28N.m                | 6.8~68N.m  | 35~350N.m   | 81.5~815N.m | 100~1000N.m  | 200~2000N.m  |  |
| Accuracy                 | ±1% (clockwise) |                          |            |             |             |              |              |  |
| Resolution               | 0.001N.m        | 0.01N.m                  | 0.01N.m    | 0.1N.m      | 0.1N.m      | 1N.m         | 1N.m         |  |
| Unit                     | N.m, in.lb, ft  | N.m, in.lb, ft.lb, kg.cm |            |             |             | N.m, ft.lb   |              |  |
| Square socket/hex driver | 1/4"            | 3/8"                     | 3/8"       | 1/2"        | 27mm        | 27mm         | 27mm         |  |
| Power supply             | DC              |                          |            |             |             |              |              |  |
| Weight                   | 0.75kg          | 0.75kg                   | 1.1kg      | 1.1kg       | 5.1kg       | 5.1kg        | 5.1kg        |  |