

MISCELLANEOUS



DC to AC Power Inverter



Modified Sine Wave 230V

150W
300W



Accessories, only for
TE-1203UB/ TE-1403UB



Microprocessor Controlled

- Make work smart and accurately. Converts 12-volt/24-volt DC to 230-volt AC power.
- Initial checking: Auto-detecting wrong battery cont. such as 12/24V.

Unique Protective Design

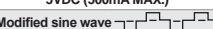

- Unique soft start to protect output short circuit.
- Low battery/Over-load/Over-heat: Shut-down or pre-alarm function.

Voltage Isolation

- High /Low voltage completely isolation for safety.

Extra USB Output

- Extra 5V USB output for using/ charging mobile phones and other USB devices.

Model No.	TE-1201UB	TE-1401UB	TE-1203UB	TE-1403UB
Input full load current	15A (12V) // 8A (24V)		30A (12V) // 15A (24V)	
Output continuous power	150W		300W	
Output surge power	450W		900W	
No load current draw	< 0.4A (12V)	< 0.3A (24V)	< 0.6A (12V)	< 0.5A (24V)
Input voltage	DC12V:10-15V	DC24V:20-30V	DC12V:10-15V	DC24V:20-30V
Output voltage/ frequency	AC 220-240V, 50Hz Crystal controlled			
USB port output	5VDC (500mA MAX.)			
Output waveform				
Efficiency	> 90%			
Output regulation	± 5% Intelligent AVR			
Auto temperature control fan	Non		Yes	
Low battery pre-alarm & shutdown	< 11V or 22V ± 0.5V or 1V Pre-alarm < 10V or 20V ± 0.5V or 1V Shut down & alarm		< 10.5V or 21V ±0.5 or 1.0V Pre-alarm < 10V or 20V ±0.5V or 1.0 Shut down & alarm	
Over heating	> 60°C Pre-alarm, > 65°C Shut down			
Over load	> 170W Pre-alarm, > 178W Shut down & alarm		> 310W Pre-alarm, > 324W Shut down & alarm	
Fuse	15Ax1 pcs	10Ax1 pcs	35A & 15Ax1 pcs	20A & 15Ax1 pcs
AC outlet				
Dimension (LxWxH)	113 x 73 x 58 mm		140 x 73 x 58 mm	
Weight	0.5 kg		0.75 kg	
Individual packing	Color Box			

DC to AC Power Inverter



Modified Sine Wave 230V

600W
1000W



TE-1206B
TE-1406B



TE-1210B
TE-1410B



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Unique Protective Design

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- Low battery/Over-load/Over-heat: Shut-down or pre-alarm function.

Voltage Isolation



- High /Low voltage completely isolation for safety.



Accessories for
TE-1206B/TE-1406B



Accessories for
TE-1210B/TE-1410B

Model No.	TE-1206B	TE-1406B	TE-1210B	TE-1410B
Input full load current	60A (12V) // 30A (24V)		100A (12V) // 50A (24V)	
Output continuous power	600W		1000W	
Output surge power	1500W		2400W	
No load current draw	< 0.6A (12V)	< 0.4A (24V)	< 0.6A (12V)	< 0.5A (24V)
Input voltage	DC12V:10~15V	DC24V:20~30V	DC12V:10~15V	DC24V:20~30V
Output voltage/ frequency	AC 220~240V, 50Hz Crystal controlled			
Output waveform	Modified sine wave 			
Efficiency	85 ~ 90%			
Output regulation	± 5% Intelligent AVR		±5% Intelligent PWM	
Auto temperature control fan	Yes			
Low battery pre-alarm & shutdown	< 10.5V ±0.5V or 21V ± 1V Pre-alarm < 9.5V ±0.5V or 20V ±1V Shut down & alarm		< 10.5V ±0.5V or 21V ± 1V Pre-alarm < 9.5V ±0.5V or 19V ±1V Shut down & alarm	
Over heating	> 60°C Pre-alarm, > 65°C Shut down & alarm			
Over load	> 615W Pre-alarm, > 644W Shut down & alarm		> 1140W Pre-alarm, > 1187W Shut down & alarm	
Fuse	25A x 3 pcs	15A x 3 pcs	20A x 6 pcs	10A x 6 pcs
AC outlet	B 			
Dimension (LxWxH)	190 x 113 x 62 mm		340 x 135 x 79 mm	
Weight	1.5 kg		2.5 kg	
Individual packing	Color Box			

MS-325 7 in 1 Multi-Function Pocket Tool Key Chain



LED light

Be careful:
a sharp blade can cut!

Material	2Cr13
HRC Body	45°±2°
Application	Serrated Saw, Opener & Slotted Screwdriver, Phillips Screwdriver, Fruit Knife, Mini LED Flashlight
OAL.(mm)	67x32
Individual packing	Double blister card

MS-525 9-in-1 Multi-Tool



- Made of stainless steel, rugged and corrosion-resistant.
- Anodized aluminum handles with nonslip grip.



Material	3Cr13, ABS
HRC Body	45°±3°
Application	Serrated Knife, Can Opener, Philips, Pliers, Screwdriver, Knife, Saw, Bottle Opener, Flat Screwdriver, Flat File
OAL.(mm)	160
Individual packing	Double blister card

MS-526 12-in-1 Multi-Tool



LED light

- Rugged stainless steel construction, corrosion-resistant.
- With nonslip rubber grip handle, more durable and comfortable.
- Comes with spring loaded long nose cutting pliers head.

Led Flash Light
(Power on/off)

Material	3Cr13
HRC Body	45°±3°
Application	Pliers, Scissor, Saw, Philips, Screwdriver, Bottle Opener, Can Opener, Knife, Flat File, Flat Screwdriver, Awl/Knife, Flat Screwdriver
OAL.(mm)	155
Individual packing	Double blister card

FL-603 LED Flexible Flashlight



LED light



Light source	Illumination	Cable size	Handle size	Battery	Individual packing
White LED	11000mcd	Ø5mm x 345mm	Ø15mm x 175mm	1.5V AAA x 3pcs (not included)	Blister card

FL-528 1W LED Head Light



- 4 angles adjustment.
- High/Low/Flash modes.
- 60 Lumens brightness.
- 80000 hours Life.

4 angles
adjustment

Lamp Material	Light source	Illumination	Battery	Dimension (mm)	Individual packing
ABS	1W white micro LED	60 Lumens	3 x 1.5V AAA	73x45x65	Blister card

FL-506 LED Flashlight



LED light

- Rugged design aluminum body and contoured body for firm grip.
- Light weight and easy to carry.
- Switch on/off control on the bottom.



Material	Light source	Battery	OAL.(mm)	Individual packing
Aluminum	LED	1.5V AA x 2pcs (Not included)	ø25x150	Blister card

FL-516 9 LED Flashlight



LED light

- Sturdy anodized aluminum construction, sealed at both ends with high grade rubber o-rings, water repellent and 1M drop protection
- LEDs last up to 100,000 hours



Material	Light source	Battery	OAL.(mm)	Individual packing
Aluminum	9pcs White LEDs	1.5V AAA x 3pcs (Not included)	ø27x92	Blister card

MS-C002 Mini Vacuum & Blowing Cleaner



Speed 25,000rpm

High speed rpm and easy-to-use handy vacuum cleaner with attachments for vacuuming / blowing / brushing off dirt and dust.



Vacuum cleaner



Camera cleaner



Crevice tool



Brush for sweeping away dust

Speed	Torque	Output	Voltage	Body size
25,000 rpm	26 g-cm	5.15W/1.83A	DC 6.0V (AA 1.5Vx4 pcs)	Φ45×130×90 mm

MS-C001 Mini Vacuum Cleaner



- Cleans keyboards, printer, photographic equipment, audio/visual equipment and all office electronics.
- Compact size design and power by battery.



Material	Voltage	OAL.(mm)	Individual packing
polypropylene	DC 6.0V (AA 1.5V x 4pcs)	128	Blister card

MS-C005I Dust Blowing & Vacuum Cleaner



2 in 1

Vacuum cleaner
Blowing cleaner

High power, fast clean
Reusing washable dust bag

- High power output 450W.
- Reusing washable dust bag.
- Easy operation and energy-saving.
- Large power trigger with conveniently located lock-on button.
- Maximum air volume of 2.3m³/min for faster clean up.
- Combines blowing and vacuum functions, quickly converts to a vacuum for added versatility.



Accessories:
1 x Air flow tube
1 x Dust bag

Power	450 W
Voltage	230V / 50Hz
No load speed	0-16000 rpm
Air Volume	2.3m³/min
Weight	50 oz (1.4Kg)
Accessories	1 x Air flow tube, 1x Dust bag
Dimensions	24.0 cm x 19.0 cm x 16.7 cm)
Individual packing	Color box

MS-153A / MS-153C Bulb Blower



Air valve made by copper
with chrome plating

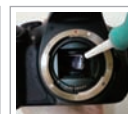
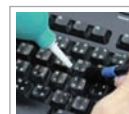
MS-153A

Comes with copper nozzle, providing high air pressure for removing dust safely and gently.



Air valve made by copper
with chrome plating

MS-153C



Model No.	Material	Nozzle Material	Nozzle Size	Air valve Material	Pump capacity	OAL.(mm)	Individual packing
MS-153A	PVC	copper with chrome plating	Φ 2.2×14 mm	copper with chrome plating	50 ml	Φ 42×94	Blister card
MS-153C		ABS	Φ 5.0×30mm		110 ml	Φ 56×140	

DK-2032 / DK-2033N / DK-2034N Fish Tape



DK-2032



DK-2033N



DK-2034N

Model No.	Container size(mm)	Steel tape size	Individual packing
DK-2032	Ø 214x27	15.2Mx3.2x1.6mm (50ftx1/8"x1/16")	PE shrink
DK-2033N	Ø 305x42	30.5Mx3.2x1.6mm (100ftx1/8"x1/16")	
DK-2034N	Ø 305x42	61.0Mx3.2x1.6mm (200ftx1/8"x1/16")	

- Made from flexible spring steel and black finish.
- Equipped with durable plastic container and slide handle.
- Easy to thread through the pipe and pull out the electric cable.

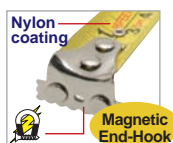
DK-2060SET/DK-2040 / DK-2041 / DK-2042 Measuring Tape

DK-2060SET
(12pcs/SET)

DK-2041

DK-2042

DK-2040



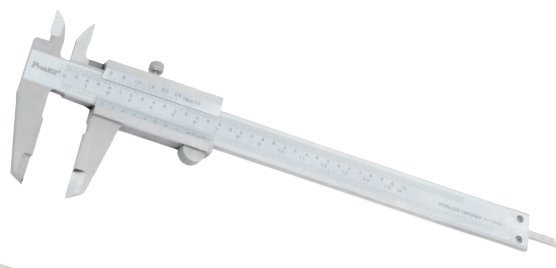
Model No.	L (Max.)	W (Max.)	Thickness(mm)	Blade coating	Individual packing
DK-2060SET	3M/10ft	16mm	0.115	PVC	Display box
DK-2040	3M/10ft	16.5mm	0.115	Nylon	Blister card
DK-2041	5M/16ft	23.0mm	0.115		
DK-2042	7.5M/25ft	24.5mm	0.110		

- Magnetic end-hook for convenient measuring.
- Anti-slip and shockproof rubber case.
- Hi-rel power tape.

PD-151 6" Electronic Caliper



PD-153 6" Standard Caliper



- Hardened stainless steel.
- High quality 6"(150mm), thumb wheel for accuracy and ease with 4 measurement: inside, outside, depth and step.
- Precision-ground and lapped measuring surface.

Model No.	Material	Range	Accuracy	Resolution	Power	Individual packing
PD-151	AISI 430	0~150mm/0~6"	±0.02mm/0.001"(<100mm) ±0.03mm/0.001"(>100mm)	0.01mm/0.0005"	LR44 (1.5V)×1 pcs	Plastic box + Color label sleeve
PD-153		0~150mm/0~6"	±0.02mm/0.001"	0.02mm/0.001"	N/A	

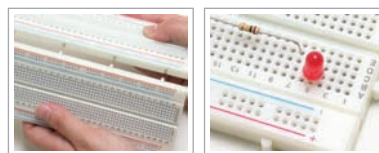
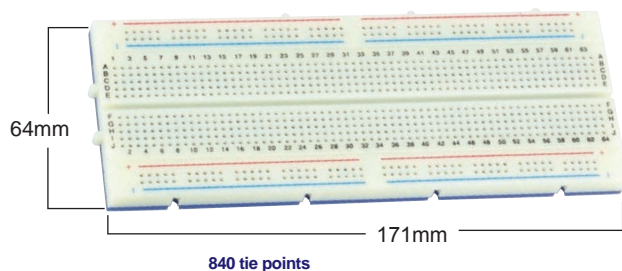


Inside dimension measurement



Outside dimension measurement

BX-4112N Round Hole Bread Board



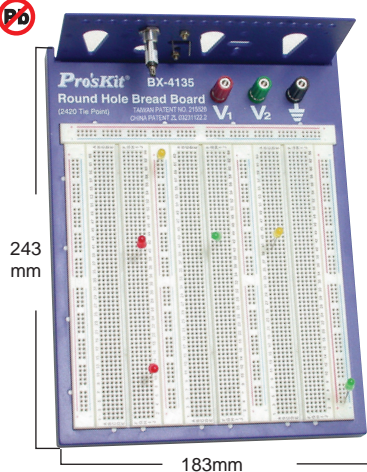
Excellent expandability Friendly graduations

- 840 tie points
- Round hole designed for easy plug and pull
- Expandable by combining several boards together to meet your different requirement
- Wearproof material made of ABS & phosphor bronze with good flexibility and electric conductivity

Individual packing

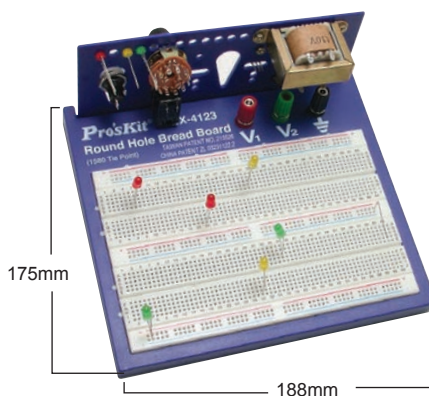
Blister card

BX-4123 / BX-4135 Round Hole Bread Board



BX-4135 2420 tie points (Demo only)

TAIWAN PATENT NO. 215526
CHINA PATENT ZL 03231122.2



BX-4123 1580 tie points (Demo only)



Edge plate can easily fold up

Application:
Used as a simulated layout for R&D and students.

- Features:**
- Round hole designed for easy plug and pull
 - Expandable by combining several boards together to meet your different requirement
 - Wearproof material made of ABS & phosphor bronze with good flexibility and electric conductivity

Model No.	Tie points	Individual packing
BX-4123	1580	Blister card
BX-4135	2420	

OP-E070 / OP-E351 Bread Board Accessory



OP-E070

- 70 pcs of 22 AWG solid wires
- Pre-cut, pre stripped and pre-formed on each end
- Variety of colors
- Completely reusable
- 14 lengths x 5 pcs each (2, 5, 7, 10, 12, 15, 17, 20, 22, 25, 50, 75, 100 and 125mm)

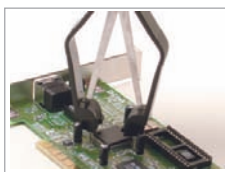
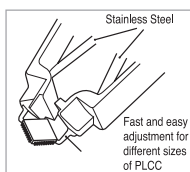
Case Size (mm)	Individual packing
165x55x15	Poly bag + Hanger



OP-E351

- 350pcs of 22 AWG solid wires
- Pre-cut, pre stripped and pre-formed on each end
- Variety of colors
- Completely reusable
- 14 lengths x 25 pcs each (2, 5, 7, 10, 12, 15, 17, 20, 22, 25, 50, 75, 100 and 125mm)

Case Size (mm)	Individual packing
178x90x28	Poly bag + Hanger

8PK-610 PLCC Extractor

A spring assisted chip carrier extraction tool, specially designed for the safe removal of PLCC's from sockets without damage to component parts.

Material	OAL (mm)	Individual packing
AISI 410 + POM	100x50	Blister card

PD-610 PLCC Extractor

Material	OAL (mm)	Individual packing
AISI 410 + POM	100x50	Blister card

908-609 IC Extractor

Stainless steel construction for removing dual in-line IC packages. (Insulated vinyl grip.)

Model No.	Material	OAL (mm)	Individual packing
908-609	AISI 420J + PVC	105	Inner box

908-609A IC Extractor

Stainless steel construction for removing dual in-line IC packages.

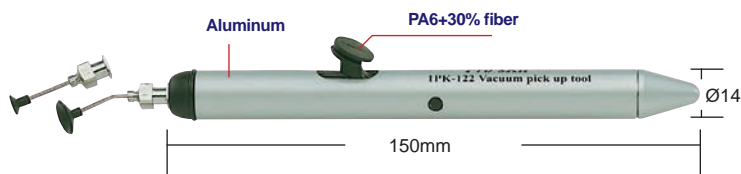
Model No.	Material	OAL (mm)	Individual packing
908-609A	AISI 420J	112	Inner box

1PK-122 Vacuum Pick-Up Tool

- The hand-held SMD vacuum pick-up tool is ideal for picking up and moving electronic components, large or small. With fountain pen dimensions, it fits easily into your hand or pocket.
- The new high-power probes have longer holding action.

Function:

- Lightweight, portable and suitable for picking and placing small components weighing up to 50 grams and having a flat surface, dilly packages and surface mount components, etc.



9122-010

Replacement caps	Individual packing
9122-010 (3pcs/bag) 4, 6, 10mm	Color box

MS-121 Vacuum Pick-Up Tool**Function:**

- The hand-held SMD vacuum pick up tool is ideal for picking up and moving large or small electronic components.
- Lightweight, portable and suitable for the picking and placing small components weight to up 50 grams and having a flat surface, dilly packages and surface mount components, etc. The new high-power probes have longer holding action.



Replacement caps	Individual packing
9122-010 (3pcs/bag) 4, 6, 10mm	Blister card



1PK-390G Inspection Mirror

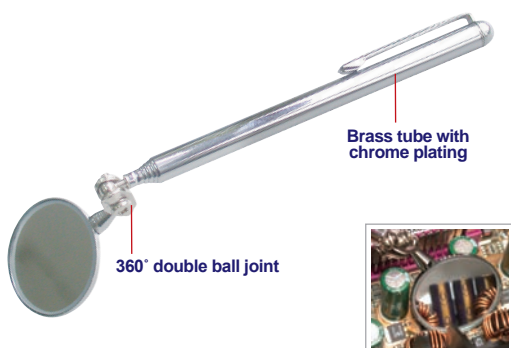


- All-angle ball joint mirror with stainless steel back.
- Visual inspection of hidden areas.
- Double ball joint links swivel mirrors for viewing to 360°.
- Made of tempered spring steel to move freely and hold desired position.
- Replaceable, plated, copper-backed, clear-view mirror.
- Non-rotating inner hex rods prevent mirror from swinging out of alignment.
- Insulating vinyl grip on 1PK-390G.



Lens size	OAL (mm)	Individual packing
50x90mm (2"x3-1/2")	216 ~ 490 (8-1/2"~19-1/4")	Blister card

MS-391 Inspection Mirror



Lens size	Extension length	Individual packing
Ø32mm (1-1/4")	178-505mm	Blister card

MS-323 Telescopic Magnetic Pick-Up Tool



Maximum pick-up	Extension length	Individual packing
454g (1lb)	178-582mm	Blister card

MS-322 Telescopic Magnetic Pick-Up Tool



- A handy chrome plated telescopic magnetic retrieving tool.
- Ideal for hard-to-reach working.
- Extension length: 170-540mm
- Maximum pick-up: 454g(1lb)



Individual packing
Blister card

8PK-220 Magnetizer Demagnetizer



- A convenient pocket sized tool, housed in a strong plastic case.
- Ideal for the general magnetizer demagnetizer of small hand tool i.e screwdriver, hexagon keys.

Individual packing
Blister card

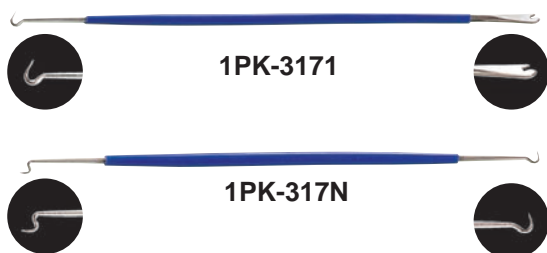
8PK-3220 20 in 1 Screwdriver With Telescoping Pick-Up Tool



- (A) Regular screwdriver with 13-pcs. screw bits 5-pcs. sockets and 1-pcs socket adaptor fits all kinds of job.
- (B) Telescoping magnetic pick-up tool (up to 17-1/2" long/440mm) stored inside the tube pulling out to pick up small metal objects.

Individual packing
Blister card

1PK-3171 / 1PK-317N Spring Hook



- Can grab small spring and wires.
- Suitable for OA field service.

Model No.	Material	OAL (mm)	Individual packing
1PK-3171	AISI 410	205	Blister card
1PK-317N	+ PVC		



1PK-3175 5 PCS Hook Set



- Contains 6 parts.
- 5 different hooks can be screwed in a handle.

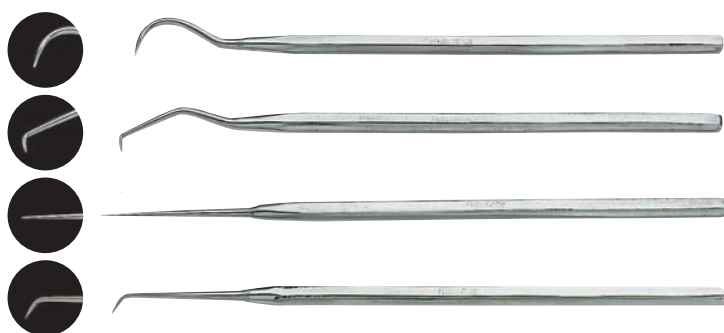
Model No.	Material	OAL (mm)	Individual packing
1PK-3175	AISI 410	210	Pouch

1PK-3178 4 PCS Probe Set

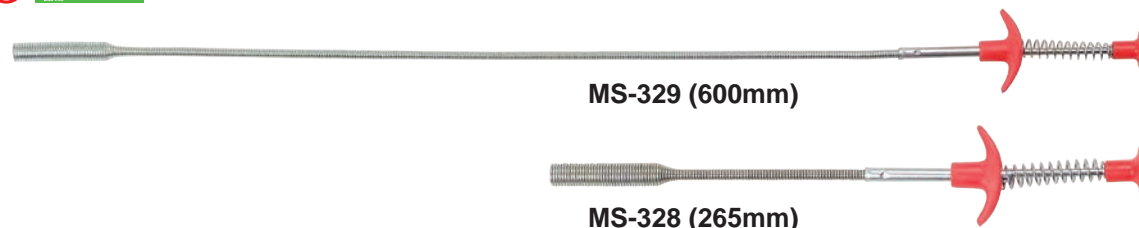


- 4pcs stainless steel single-ended probe that can be used for all kinds of precision work in electronics.
- Hook, curved, straight and angle tips 4 types packed in a vinyl pouch.

Model No.	Material	OAL (mm)	Individual packing
1PK-3178	AISI 410	Straight:145 Angled:140	Pouch



MS-328 / MS-329 Push-button Pick-up Tool



MS-329 (600mm)

MS-328 (265mm)



Open the jaws Pick up the object easily

- MS-328: Push-Button Pick-Up Tool has a 265mm flexible stem with a small set of jaws at one end.
- MS-329: Long Push-Button Pick-Up Tool has a 600mm flexible stem with a small set of jaws at one end.
- Ideal for home, shop, garage, work place etc.

Individual packing Blister card

MS-327 Long Pick-up Tool with Magnet Tip



MS-327 (620mm)

Powerful magnet lifts

1.5KG



Pick up small metallic objects from inaccessible areas

- Long Pick-Up Tool with Magnet Tip is an extendable magnetic tool for picking up small metallic objects from inaccessible areas.
- This Pick-Up Tool has a 620mm flexible stem with a strong magnet at one end.
- Powerful magnet lifts 1.5KG
- Ideal for home, shop, garage, work place etc.

Individual packing Blister card

MS-533 Pump-Action Drill Set



For use with

MICRO SIZED BITS

OAL:190mm



Ideal for drilling soft materials with thickness less than 5mm thickness, such as woods, pc board, plastic board and more.

- Chuck rotates as spindle nut is depressed, spring automatically rewinds to top.
- Drills automatically in a stroke, easy to use and efficient.
- Includes 2pcs collet jaws for bits 0.5mm and 1.0~1.5mm (Bits are not included).
- Brass and steel construction with chrome finish.



1PK-H064 Precision Hand Drill



Blade material	HRC	Diameter	Working length	Individual packing
HSS	56°±3°	Ø3.5mm	31mm	Blister card

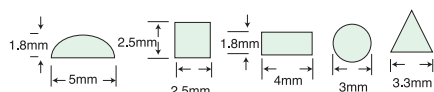
8PK-H081 Automatic Center Punch



High speed steel (HSS)

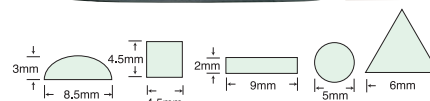
Tip Material	OAL (mm)	Individual packing
HSS	133	Blister card

8PK-605A 5 PCS Needle File Set



Material	HRC	Cut length	Handle O.D.	OAL	Individual packing
SKS-8	60°	75mm	Ø 5mm	170mm	Pouch

8PK-605L 5 PCS Needle File Set



Material	HRC	Cut length	Handle O.D.	OAL.(mm)	Individual packing
SKS-8	60°	85mm	Ø 7mm	180	Pouch

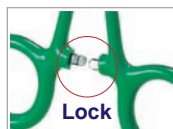
1PK-T405 / 1PK-T406 / 1PK-T416 Stainless Steel Forceps



1PK-T405
1PK-T406



1PK-T416



Model No.	Material	Type	OAL.(mm)	Individual packing
1PK-T405	AISI 410	Straight	130(5")	Blister card
1PK-T406			160(6")	
1PK-T416		Curved	160(6")	

PD-376 Multi-Angle Swivel-Actions Vacu-Vise



- Suction areas must be smooth, flat and clean.
- Adding a little water under vacuum base is recommended.

- Swivels 360° and tilts 90° to desired angle.
- 2.8" (70mm) metal jaws open to 2.7" (68mm).
- Equipped with slide-on rubber jaw for fragile work.
- 6 1/4" (158mm) triangular base.
- Aluminum die-cast construction.
- Light weight and durable.

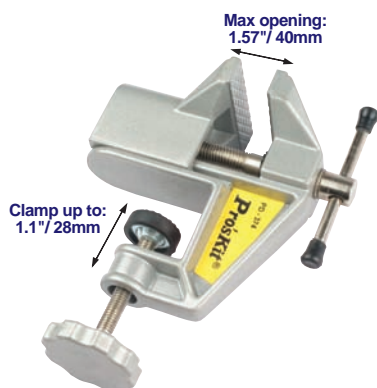
Individual packing
Plain box+Color label



PD-374 Hobby Vise



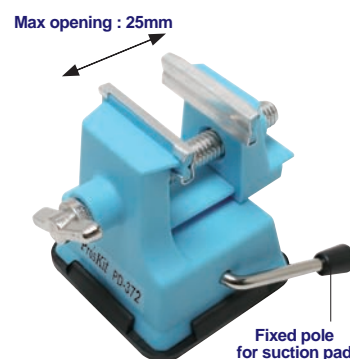
Individual packing
Blister card



PD-372 Mini Vise



Individual packing
Blister card



PD-2609 8 oz Curved Claw Hammer



Material	Weight	OAL (mm)	Individual packing
Handle: PP/TPR, S45C	227g (8 oz/0.5 lb)	250	Hanger

PD-2612 8 oz Curved Claw Hammer

- Made of S45C carbon steel, polished drop-forged and tempered steel head
- Curved claw offers maximum nail-pulling leverage



Material	Weight	OAL (mm)	Individual packing
Handle: PVC, S45C	227g (8 oz/0.5 lb)	250	Hanger

PD-2606 Heavy Duty Curved-Claw



Material	Weight	OAL (mm)	Individual packing
Handle: Fiberglass, S45C	454g (16 oz/1 lb)	330	Bulk

PD-2607 Ball Pen Hammer



Material	Weight	OAL (mm)	Individual packing
Handle: Fiberglass, S45C	454g (16 oz/1 lb)	300	Bulk

MS-161 Heavy-Duty Suction Cup

- Ideal for open Imac, Ipad & glass-sheathed laptop displays
- Comes with ABS handle and TPR suction cap, features comfortable grip and high suction capacity up to 11kgs.



- Size: $\Phi 58\text{mm} \times 72\text{mm}$
- Max. Load: 11kgs (24.3lbs)

Individual packing
Blister card



MS-018 Leak proof dispenser pump bottle

- Portable leak proof construction.
- Bottle scale indication.
- Anti dumping of cone design.
- No chemical reaction Polypropylene material.
- Perfect for fiber cleaning, nail treatment and more.



Material	Capacity	Individual packing
Polypropylene	180ml	Poly bag



MS-004/MS-006/MS-008 Liquid Dispenser Bottles



- Polyethylene bottles are not chemically reactive
- Purity pump to prevent backwash of contaminants into container

Model No.	Description	Individual packing
MS-004	4 oz/114 ml	Poly bag + Hanger
MS-006	6 oz/170 ml	Poly bag + Hanger
MS-008	8 oz/227 ml	Poly bag + Hanger



MS-008



MS-006



MS-004

MS-035 Flux Bottle



- Dispenses flux evenly with a fine tipped needle.



Material	OAL. (mm)	Individual packing
PE	$\Phi 37 \times 122$	Poly bag + Hanger (2 pcs/pack)

7UR / 7UY / 7UG Telecom Splice



Crimping Tool
Page. 90
(1PK-CT006)



Model No.	Description	Application	Individual packing
7UR	UR connectors 1000 pcs/pack	19-26 AWG	Bulk
7UY	UY connectors 1000 pcs/pack	22-26 AWG	
7UG	UG connectors 1000 pcs/pack	19-26 AWG	

MS-V305 / V306 / V308 Hook and Loop Cable Ties



Material	Material	OAL (mm)	Individual packing
MS-V305	Nylon / P.P	12x125	Poly bag (15 pcs/pack)
MS-V306		12x150	
MS-V308		12x200	

OP-1200 Cable Tie Assortments-1200 PCS



Cable Tie Gun Page. 93
(CP-382/CP-385)

Description (mm)	Q'ty	Color	Individual packing
2.4x100	200 each	Natural	Color label
		Black	
		Red	
		Green	
		Yellow	
2.5x140	100	Black	Color label
3.6x200	100	Natural	

Carrying case: $\Phi 120 \times 310\text{mm}$

