

The excellence of the unit determines the performance of the entire system!!

7 Seven major advantages



MODEL
PSU-500

Basic specifications			
●Thread solder	φ 0.5~1.6	●Heater temperature	300~800°C
●Solder feed unit	0.08mm	●Heater capacity	100W×2
●Solder cut length	0.5~4mm	●Input data	16 data / 1 point
●Number of solder cuts	1 to 10 times	●Memory capacity	Max 200 points (765 points optional)
●Vertical stroke	Max 30 mm / 0.015 mm steps	●Block separation	16 block / 200 points
●Cleaning	Automatic cleaning	●Operation mode	Operation modes to suit different work pieces
		●Input voltage	100VAC 4A 50/60Hz
		●Air input	0.5MPa
		●Weight	MAX7Kg
		●Dimensions	140W×200D×350Hmm
		●Machine interface	15-pin D-sub connector
		●Options	Data editing function RS232C

Point soldering unit (PSU-500)

1 Ceramic tip is used for soldering!

The soldering ceramic tip provides more than 2000 hour of operating life with less need to change soldering conditions. The costs of replacing soldering tips can be kept minimal.

2 Stability of solder amount and saving solder usage

The soldering method of PSU500 is that cutting off thread-solder and soldering with ceramic tips. This method ensures the stability of solder amount per joint. There is no waste solder because solder dose not stick on ceramic tips, it can save 30% solder usage.

There is no solder bridging between terminals.

The result is a cheaper and more reliable solder uniformity in amount than when using cream solder, ring solder or ball solder.

3 Stable heating system

The ceramic heater is used as the soldering tip in our system. And the heating rate of our soldering ceramic tip is high as 100°C/sec. So our soldering ceramic tip provides stabilized heat supply and it makes high-speed stabilized soldering possible.

4 Digital soldering

By entering details of the soldering know-how into the system, the robot then takes care of all soldering with expert's skills. Almost all soldering conditions have been digitalized.

5 High yield

PSU500 provides high yield because primal factors of instability on soldering which are changes of the shape of a soldering tip through the operation, instability of solder amount and changes in heat amount have all been eliminated.

6 Very few solder ball and flux scattering

There are very few solder balls or flux scattering when solder melts because solder is heated between two heaters.

7 Shorter soldering time

Soldering time depends on the amount of heat required for soldering work piece. PSU-500's soldering tips heats up instantaneously, so PSU500 should reduce your soldering time by half compared to the conventional systems.



Point Soldering Unit / Robot

New proposals of digital soldering system

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Cosmic Corporation

The ultimate tool for the solution of various defects in soldering

If you have a problem with soldering including lead-free soldering, please contact us.

The soldering unit with Cartesian robot

This point soldering robot is a multi-functional soldering unit with Cartesian robot. This robot is also accommodated to small lot production of a variety of items.

■The standardized unit for lead-free solder

PSU500 is accommodated to lead-free solder without nitrogen (N₂), which does not require extra costs. Perfect performance on through-hole soldering. Two soldering ceramic tips surround through-hole or the area to be soldered. This method prevents heat escaping and it provides more efficient soldering operations.

■Very few soldering balls

The scattering of soldering ball has been reduced dramatically by cutting thread-solder. Because there is not much flux-explosion when the cut solder melt and if the cut solder explode, most of burst solder balls should remain between two heaters.

■Data input

Both PC and robot terminal can be used to input data on all axis at the same time, and up to 16 kinds of data are stored within the unit as standard.

■Various editing input methods

All required functions such as insert, delete and modify the data are included as standard.

■Automatic cleaning

A ceramic heater is used as a soldering tip. Solder dose not wet on the ceramic tip so the ceramic tip is hard to get dirty compare to metallic soldering tip. Thus PSU500 dose not require the tip cleaning each time. The ceramic tip is need to be cleaned every 500 or 1000 point of soldering.

★X-axis 100 to 400 mm Y-axis 100 to 600 mm θ-axis 320°

★High accuracy with low cost.

★There is no bridging even when soldering a narrow pitch like 0.8 mm because our robot is highly rigid.



Soldering example

Soldering of wire lead and component



Soldering of terminal

Correction system of positions and height!!



Optional accessories
P/N HITMSU-50

MODEL
PDSTC1020
(Overhead in-line type robot)

Specifications	
For soldering unit (including Z-axis) refer to the following points	
Model PSU-500	
Positioning unit (XYθ)	
●X-axis	100
●Y-axis	200
●θ-axis	320°
●Motor	AC servo for X-Y-θ axis
●Coordinate input	Teaching input, value input
●Work switching	Standard 16 kinds, max 100 kinds
●Data communication	RS232C

MODEL
PDSBC2030 (Desk top type)

Specifications	
For soldering unit (including Z-axis) refer to the following points	
Model PSU-500	
Positioning unit (XYθ)	
●X-axis	200
●Y-axis	300
●θ-axis	320°
●Motor	AC servo for X-Y-θ axis
●Coordinate input	Teaching input, value input
●Work switching	Default 16 kinds, max 100 kinds
●Data communication	RS232C

Monitor camera is installed for soldering!!



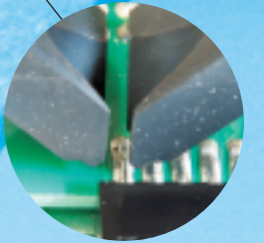
Monitor camera
P/N ANACAM-50

Easy cleaning!!

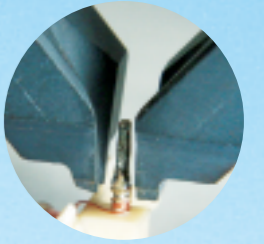


The soldering tip cleaning unit
P/N BLAST-300

Soldering example

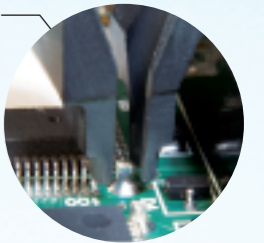


Soldering of flat cable or connectors

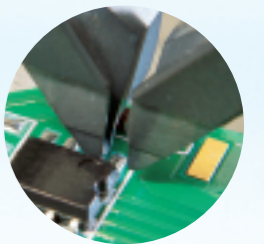


Soldering of coil wire

Soldering example



Soldering of inserted components



Soldering of SMD terminals

MODEL
PDS2BC2030 (Dual stage type)

Specifications	
For soldering unit (including Z-axis) refer to the following points	
Model PSU-500	
Positioning unit (XYθ)	
●X-axis	200
●Y-axis	300×2
●θ-axis	320°
●Motor	AC servo for X-Y-θ axis
●Coordinate input	Teaching input, value input
●Work switching	Default 16 kinds, max 100 kinds
●Data communication	RS232C

