

# **SMALLSMT**

Wenzhou SMALL Technology co. Ltd

## **VP-2800HP-CL64-4R**



PROFESSIONAL PICK AND PLACE MACHINE PROVIDER



V1.5  
10.10.2021

**[www.smallsmt.biz](http://www.smallsmt.biz)**

Company registration number: 91330381MA285PEJ8R, Address: 202 B,Nan Bingjiang Building, Xinfeng Village, Feiyun Town, Rui'an City, Wenzhou City, Zhejiang Province, China 365207

## Parts delivered

### Full working machine including:

push feeder, pcb holder, vision system 2x USB2 3MP cameras, 1x USB3 1,3MP bottom camera, small spare parts, 2 pcs spare stepper controller, machine calibration on DVD, Z-axis sensor, manuals and software setup need to get downloaded from website, big IC tray, USB to serial converter.

### Optional:

Nozzles, vibration feeder, CL feeder cassettes, 19 slot nozzle changer, strip feeder, dipping station

## Product parameter

<b>Model</b>	VP-2800HP-CL64-4R
<b>Mounting area</b>	350x300mm maximum 600x400mm (using custom PCB holder)
<b>XY moving range</b>	665x655mm
<b>Z moving range</b>	32mm (2021 model) , Z-axis sensor tip included
<b>Number of heads</b>	4
<b>Resolution XY, Z, A</b>	0.025mm, 0.025mm, 0.0125° (360°) placement pitch >=0.45mm
<b>Motor type</b>	AC Servo 400W / 1000W
<b>Positioning mechanics</b>	Ballscrew system HIWIN 0,03mm precision over 300mm travel
<b>Machine guide lines</b>	HIWIN linear guide lines
<b>Positioning system</b>	Closed loop encoder coupled to ballscrew spindle
<b>Placement speed with vision</b>	2000 to 5500cph
<b>Nozzle changer</b>	optional 19 slot nozzle changer
<b>Nozzle type</b>	Samsung CP45 NEO
<b>Vision system</b>	1 top and 2 bottom USB cameras using different optics
<b>Alignment modes</b>	area centering and vision model based assistance, closed loop
<b>Placement range</b>	0201 to 40x40mm
<b>Feeder types</b>	Push feeder, CL feeder, vibration feeder, strip feeder, trays
<b>CL Feeder slots</b>	2x 32x 8mm cassettes slots South / North total 64 CL feeder slots
<b>Push feeder count</b>	35x 8mm lines (not possible if conveyour installed!)
<b>Vibration feeder</b>	Optional 4x vibration feeder using each 7x SO-8 tubes width
<b>JEDEC Tray</b>	2x Jedec tray holder included
<b>Dispenser Option</b>	optional dispenser option on head 4
<b>Machine dimensions</b>	1300x1100x570mm
<b>Machine weight</b>	185kg
<b>Shipping weight</b>	235kg
<b>Shipping size</b>	1380*1190*750mm
<b>PCB Transport</b>	Optional 3 Zone conveyour including 2 side SMEMA interface
<b>Power supply</b>	AC 230V
<b>Air supply</b>	External oil and water free 110L/min at 6Bar Integrated 3 pressure regulator for push feeder, vacuum generator and CL feeder bank
<b>Warranty</b>	12 Months parts exchange including shipping fee excluding consumables like nozzles and belts.

Customer need to exchange parts on machine.

For detailed pictures and videos please visit our website.

Company registration number: 91330381MA285PEJ8R, Address: 202 B,Nan Bingjiang Building, Xinfeng Village, Feiyun Town, Rui'an City, Wenzhou City, Zhejiang Province, China 365207

## Camera specifications

	Top camera	Bottom camera 1	Bottom camera 2
Model	UB300C	SUA134GC-T	UB300C
USB type	USB2.0	USB3.0	USB2.0
Sensor	1/2"CMOS	1/2"CMOS	1/2"CMOS
Shutter type	Rolling shutter	Global shutter	Rolling shutter
Camera Type	Color camera	Color camera	Color camera
Pixel size	3.2X3.2μm	4.8*4.8μm	3.2X3.2μm
Picel count	3MP	1,3MP	3MP
Resolution + frame	2048X1536@12.8FPS	1280X1024@241FPS	2048X1536@12.8FPS
Color depth	10bit	8bit	10bit
Sensitivity	1.0V/lux-s 550nm	7.3V/lux.s 540nm	1.0V/lux-s 550nm
Acquisition mode	Continuity/soft trigger	Continuity/soft trigger/hard trigger	Continuity/soft trigger
Focal length	12mm (distortion 1%)	12mm (distortion 1%)	12mm (distortion 1%)

This machine has high speed camera system and can adjust 4 heads at the same time!



**New Z-axis sensor included to measure pickup height**



**Optional dipping station unit**