

# SMALLSMT

Wenzhou SMALL Technology co. Ltd

## VP-2800HP-CL64-4RCV

3-zone conveyour including SMEMA interfaces on both sides integrated!



PROFESSIONAL PICK AND PLACE MACHINE PROVIDER



V1.0  
20.09.2021

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

## 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, conveyor, manuals and software setup need to get downloaded from website, big IC tray, USB to serial converter.

### Optional:

Nozzles, vibration feeder, CL feeder cassettes, strip feeder, dipping station

## Product parameter

<b>Model</b>	VP-2800HP-CL64-4RCV
<b>Mounting area</b>	320x300mm maximum 300x600mm if zone 1 and zone 3 not used for parking PCB's
<b>XY moving range</b>	665x655mm
<b>Z moving range</b>	20mm
<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 4500cph
<b>Nozzle changer</b>	optional 19 slot nozzle changer under development!
<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
<b>Placement range</b>	0201 to 40x40mm
<b>Feeder types</b>	CL 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>	not possible
<b>Vibration feeder</b>	not possible
<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>	205kg
<b>Shipping weight</b>	255kg
<b>Shipping size</b>	1380*1190*750mm
<b>PCB Transport</b>	3 Zone conveyour including 2 side SMEMA interface
<b>Power supply</b>	AC 230V / 110V
<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.

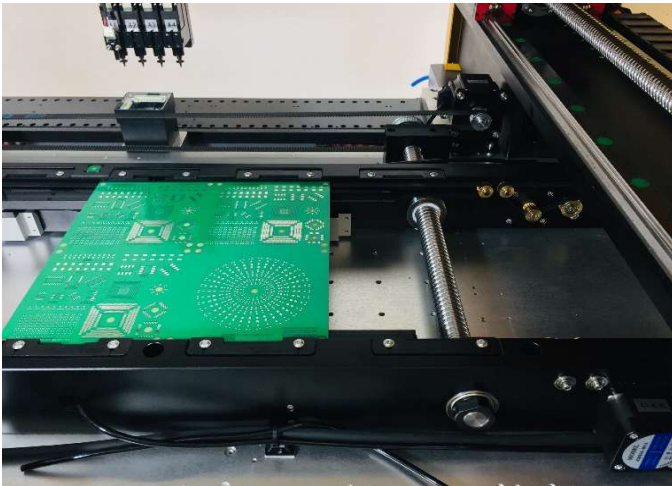
Customer need to exchange parts on machine.

For detailed pictures and videos please visit our website.

## 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!



**Integrated 3-zone conveyor unit**



**Optional dipping station**

**SMEMA compatible connectors for synchronisation on input and output side!**

