

# **Specifications**

**placeALL**

## placeALL®520 Pick & Place System

### Technical Data\*

		placeALL®520	
		Stand alone	In line
Productivity	Placement speed	4.000 cph	
	IPC 9850**	3.200 cph	
	Feeder setup	<1 Minute for completion	
	Job changeover time	<1 Minute (loading job, adjust conveyor/table, restart production)	
Accuracy	Resolution X-Y- axis	0,5 µm- recognized directly	
	Resolution Z- axis	8 µm	
	Resolution R- axis	<0,003°	
	30mm laser	+/- 100 µm	
	Vision system I	+/- 40 µm	
	Vision system II	+/- 40 µm	
Feeder	System	Fritsch tapeFEEDER	
	Capacity 8/12 mm tapeFEEDER	max. 100	max. 50 / 75
	Capacity blockFEEDER	max. 200 8 mm tapes	max. 100 / 150 8 mm tapes
	Capacity Tray- / bulk component positions	max. 400	
	Tape width	8 mm - 72 mm	
Feeder types	Roll	tapeFEEDER, blockFEEDER, tapestripFEEDER	
	Tape strip	Universal Tape Strip Feeder, tapestripFEEDER	
	Tube	vibration tubeFEEDER	
	Tray	Tray Support, trayFEEDER	
	THT LED	ledFEEDER	
	Label	lableFEEDER	
	Dome	domeFEEDER	
	Bulk component	Half or fully automatic	
	Special feeder	On request (e.g. Labels, Domes,...)	
Components	Size range	0201 - 32 x 32 mm standard 0201 - 70 x 70 mm with vision system	
	Pitch	0,4 mm	
	min. component height	50 µm	
	max. component height	standard 15 mm option > 20 mm	
	Process height	15 mm space: laser to PCB support 17,5 mm	
PCB	min. PCB dimension	3 x 3 mm	50 x 35 mm
	max. PCB dimension	520 x 430 mm to System-Block 520 x 360 mm	450 x 300 mm option ~1000 x 300 mm
	max. PCB thickness	10 mm	5 mm
	max. PCB weight	> 20 kg	2 kg option > 2 kg
	max. edge clearance	52 mm	45 mm
	Conveyor height	-	SMEMA 940 - 965 mm

\* The technical data are maximum values and can be partially achieved only under certain conditions and with optional extensions.

\*\* Based on IPC 9850 but with minor modifications.

Subject to change 05/2020

## Configuration

		placeALL®520	
		Stand alone	In line
Machine base	Pick & Place heads	max. 1	
	Magnetic PCB table	●	-
	Component blow function	●	
	Illumination for placement area	●	
	Signal light	●	
	Tool changer	12 positions	
	Placement tools	6 standard	
	Dividable frame	○	
	Maintenance kit	●	
	Dispensing systems	Dispensing heads	max. 2
Fritsch time/pressure (3, 5, 10, 30cm <sup>2</sup> )		△	
Martin time/pressure (3, 5, 10, 30cm <sup>2</sup> )		△ max. 1	
PCB handling	SMEMA interface	-	●
	Batch conveyor (left or right)	-	△
	Inline system	-	△
Software	WIN I0	●	
	Fritsch placeALL software	●	
	Touch screen	△	
	Component data bank	●	
Software options	Universal CAD-converter	●	
	Automatic datum point recognition	●	
	Offline programming	△	
	Bad Mark recognition	△	
	PABarcode	△	
	PABarcode-Label	△	
	PAStatistik	△	
	PATrace	△	
	PANetState	△	
	PAStorage	△	
	PALoose Components	△	
	PAsmartBULK	△	
	PALevel	△	
	PALineDispense	△	
	PALEDpairing	△	
Centering system	30mm laser	●	
	Vision system II	△	

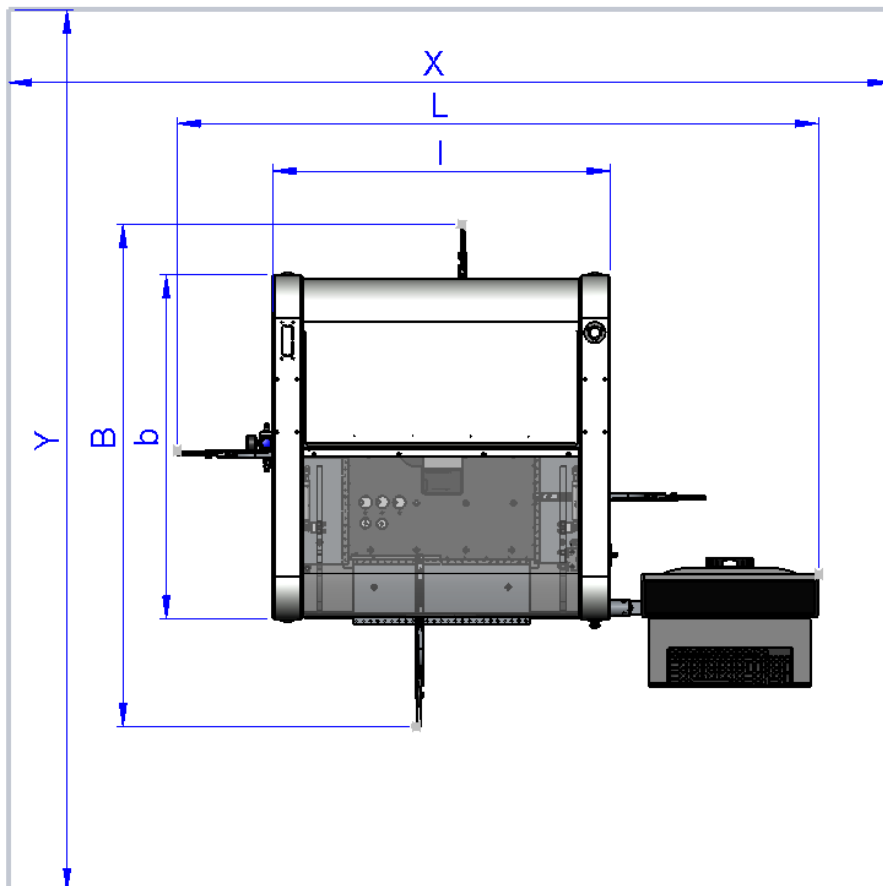
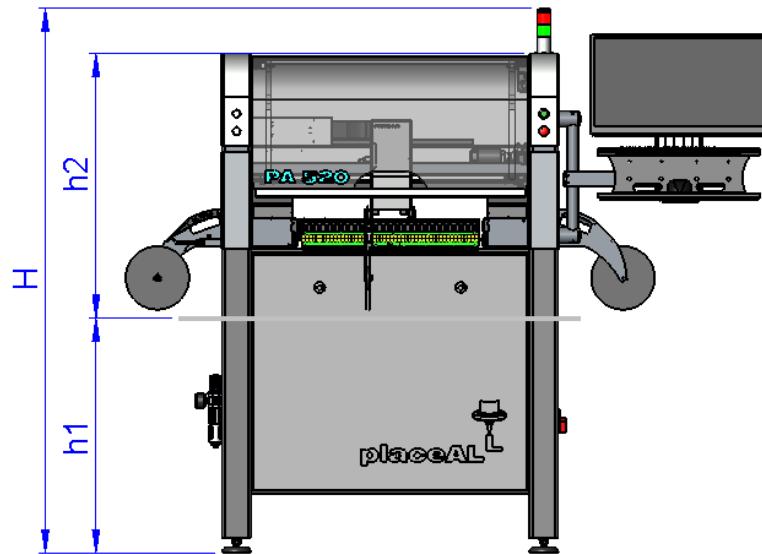
- standard
- option, not upgradeable
- △ option, upgradeable at any time

Subject to change. 04/2020

## Machine dimensions, Packaging and Supplies

		<b>placeALL®520</b>
Machine dimensions	Machine footprint (l, b)	955 x 975 mm
	Machine footprint (L, B, H) with feeder and monitor holder	1820 x 1425 x 1570 mm
	Operating floor space (X, Y)	2500 x 2500 mm
	Dimensions dividable frame	h1 < 700 mm; h2 < 800 mm
	Machine weight without feeder	~ 350 kg
Supplies	Supply voltage	110 V / 230 V, 50 Hz
	Power consumption	1500 VA
	Compressed air	min. 5,7-6 bar (0,01 micro filter, oil and dust-free air)
	Compressed air connection	Coupling plug (NW7,2) ¼ inch
	Air consumption	max. 60 L/min – with vacuum pump max. 20 L/min
Environment	Humidity	50 – 75 %
	Operating temperatur	15 – 30° C
	Noise level	50 – 70 dB

Subject to change 05/2020



PA520

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## placeALL®620/L, placeALL®610XL Pick & Place System

### Technical Data\*

		placeALL®620	
		Stand alone	In line
Productivity	Placement speed	1 head: 6.000 cph / 2 heads: 10.500 cph	
	IPC 9850**	1 head: 4.600 cph / 2 heads: 6.800 cph	
	Feeder setup	<1 Minute for completion	
	Job changeover time	<1 Minute (loading job, adjust conveyor/table, restart production)	
Accuracy	Resolution X-Y-Achse	0,5 µm – recognized directly	
	Resolution Z-Achse	8 µm	
	Resolution R-Achse	0,012° - recognized directly	
	20mm laser	+/- 100 µm	
	Vision system I	+/- 30 µm	
	Vision system II	+/- 30 µm	
Feeder	System	Fritsch tapeFEEDER	
	Capacity 8/12 mm tapeFEEDER	max. 108	max. 64 / 86
	Capacity blockFEEDER	max. 208 8mm tapes	max. 124 / 166 8mm tapes
	Capacity Tray- / Schüttgutpositionen	max. 400	
	Tape width	8 mm – 72 mm	
Feeder types	Roll	tapeFEEDER, blockFEEDER, tapestripFEEDER	
	Tape strip	Universal Tape Strip Feeder, tapestripFEEDER	
	Tube	vibration tubeFEEDER	
	Tray	Tray Support, trayFEEDER	
	THT LED	ledFEEDER	
	Label	labelFEEDER	
	Dome	domeFEEDER	
	Bulk component	Half or fully automatic	
	Special feeder	On request (e.g. Labels, Domes,...)	
Components	Size range	0201 – 22 x 22 mm standard (option 32 x 32 mm) 0201 - 70 x 70 mm with vision system	
	Pitch	0,3 mm	
	min. component height	50 µm	
	max. component height	standard 20 mm / option 25 mm	
	Process height	22 mm space: laser to PCB 27,5 mm	
PCB	min. PCB dimension	3 x 3 mm	50 x 35 mm
	max. PCB dimension	520 x 430 mm to System-Block 520 x 360 mm	450 x 300 mm option ~1000 x 300 mm
	max. PCB thickness	10 mm	5 mm
	max. PCB weight	>20 kg	2 kg option > 2 kg
	max. edge clearance	52 mm	45 mm
	Conveyor height	-	SMEMA 940 – 965 mm

\* The technical data are maximum values and can be partially achieved only under certain conditions and with optional extensions.

\*\* Based on IPC 9850 but with minor modifications.

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placeALL®620L		placeALL®610XL	
Stand alone	In line	Stand alone	In line
1 head: 6.000 cph / 2 heads: 10.500 cph			
1 head: 4.600 cph / 2 heads: 6.800 cph			
<1 Minute for completion			
<1 Minute (loading job, adjust conveyor/table, restart production)			
0,5 µm – recognized directly			
8 µm			
0,012° - recognized directly			
+/- 100 µm			
+/- 30 µm			
+/- 30 µm			
Fritsch tapeFEEDER			
max. 144	100 / 122	max. 176	132 / 154
max. 284 8mm tapes	200 / 242 8mm tapes	max. 346 8mm tapes	262 / 304 8mm tapes
max. 400			
8 mm – 72 mm			
tapeFEEDER, blockFEEDER, tapestripFEEDER			
Universal Tape Strip Feeder, tapestripFEEDER			
vibration tubeFEEDER			
Tray Support, trayFEEDER			
ledFEEDER			
labelFEEDER			
domeFEEDER			
Half or fully automatic			
On request (e.g. Labels, Domes,....)			
0201 – 22 x 22 mm standard (option 32 x 32 mm)			
0201 - 70 x 70 mm with vision system			
0,3 mm			
50 µm			
standard 20 mm / option 25 mm			
22 mm space: laser to PCB 27,5 mm			
3 x 3 mm	50 x 35 mm	3 x 3 mm	50 x 35 mm
9100x 430 mm to System-Block 910 x 360 mm	450 x 300 mm option ~1000 x 300 mm	910 x 760 mm to System-Block 910 x 670 mm	520 x 620 mm
10 mm	5 mm	10 mm	
>20 kg	2 kg option >2 kg	>20 kg	1 kg option >1 kg
52 mm	45 mm	32 mm	28 mm
-	SMEMA 940 - 965 mm	-	SMEMA 940 – 965 mm

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## Configuration

		placeALL®620		placeALL®620L		placeALL®610XL	
		Stand alone	In line	Stand alone	In line	Stand alone	In line
Machine base	Pick & Place heads	max. 2					
	Magnetic PCB table	•					
	Component blow function	•					
	Illumination for placement area	•					
	Signal light	•					
	Tool changer	12 positions per head				8 positions per head	
	Placement tools	6 standard					
	Dividable frame	○				-	
	Maintenance kit	•					
Dispensing systems	Dispensing heads	max. 2					
	Fritsch time/pressure (3, 5, 10, 30cm³)	Δ					
	Martin time/pressure (3, 5, 10, 30cm³)	Δ max. 1					
	Jetter (Liquidy, Musashi, Vermes) (3, 5, 10cm³)	Δ max. 1					
PCB handling	SMEMA interface	-	•	-	•	-	•
	Batch conveyor (left or right)	-	Δ	-	Δ	-	Δ
	Inline system	-	Δ	-	Δ	-	Δ
Software	WIN 10	•					
	Fritsch placeALL software	•					
	Touch screen	Δ					
	Component data bank	•					
Software options	Universal CAD-converter	•					
	Automatic datum point recognition	•					
	Offline programming	Δ					
	Bad Mark recognition	Δ					
	PABarcode	Δ					
	PABarcode-Label	Δ					
	PAStatistik	Δ					
	PATrace	Δ					
	PANetState	Δ					
	PAStorage	Δ					
	PALoose Components	Δ					
	PAsmartBULK	Δ					
	PALevel	Δ					
	PALineDispense	Δ					
PALEDpairing	Δ						

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		placeALL®620		placeALL®620L		placeALL®610XL	
		Stand alone	In line	Stand alone	In line	Stand alone	In line
Centering system	20mm laser	●					
	30mm laser on request	max. 1 head					
	Vision system II	Δ					

- standard
- option, not upgradeable
- Δ option, upgradeable at any time

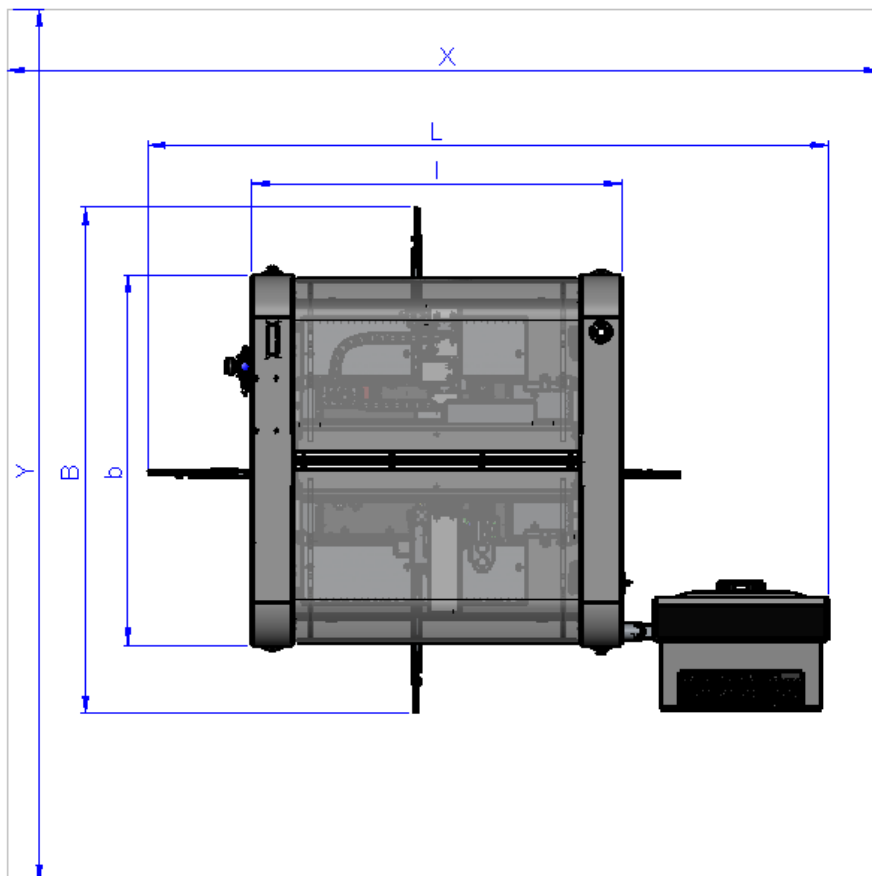
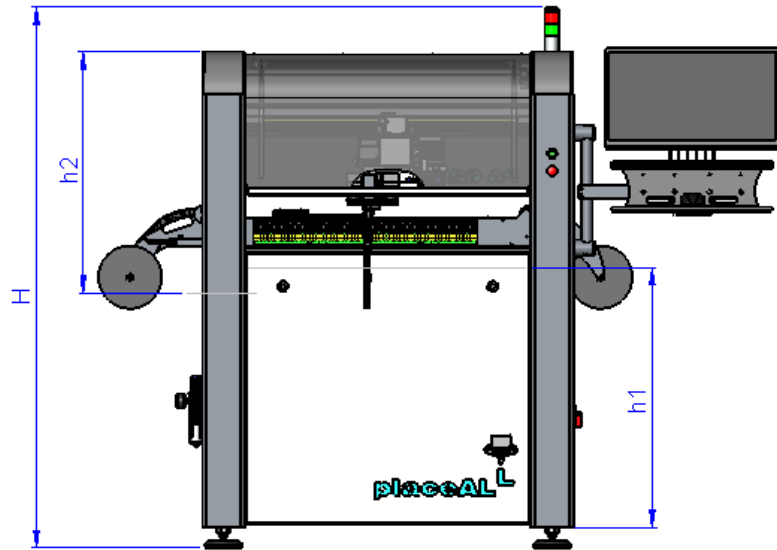
#### Machine dimensions, Packaging and Supplies

		placeALL®620	placeALL®620L	placeALL®610XL
Machine dimensions	Machine footprint (l, b)	1060 x 1060 mm	1420 x 1060 mm	1440 x 1380 mm
	Machine footprint (L, B, H) with feeder and monitor holder	2000 x 1500 x 1600 mm	2350 x 1500 x 1600 mm	2350 x 1800 x 1500 mm
	Operating floor space (X, Y)	2500 x 2500 mm	2900 x 2500 mm	2900 x 2800 mm
	Dimensions dividable frame	h1 <750 mm; h2 <700 mm		-
	Machine weight without feeder	~ 650 kg	~ 800 kg	~ 1000 kg
Supplies	Supply voltage	110 V / 230 V, 50 Hz		
	Power consumption	1500 VA		
	Compressed air	min. 5,7-6 bar (0,01 micro filter, oil and dust-free air)		
	Compressed air connection	Coupling plug (NW7,2) ¼ Zoll		
	Air consumption	max. 60 / 120 L/min – with vacuum pump max. 20 L/min		
Environment	Humidity	50 – 75 %		
	Operating temperatur	15 - 30° C		
	Noise level	50 - 70 dB		

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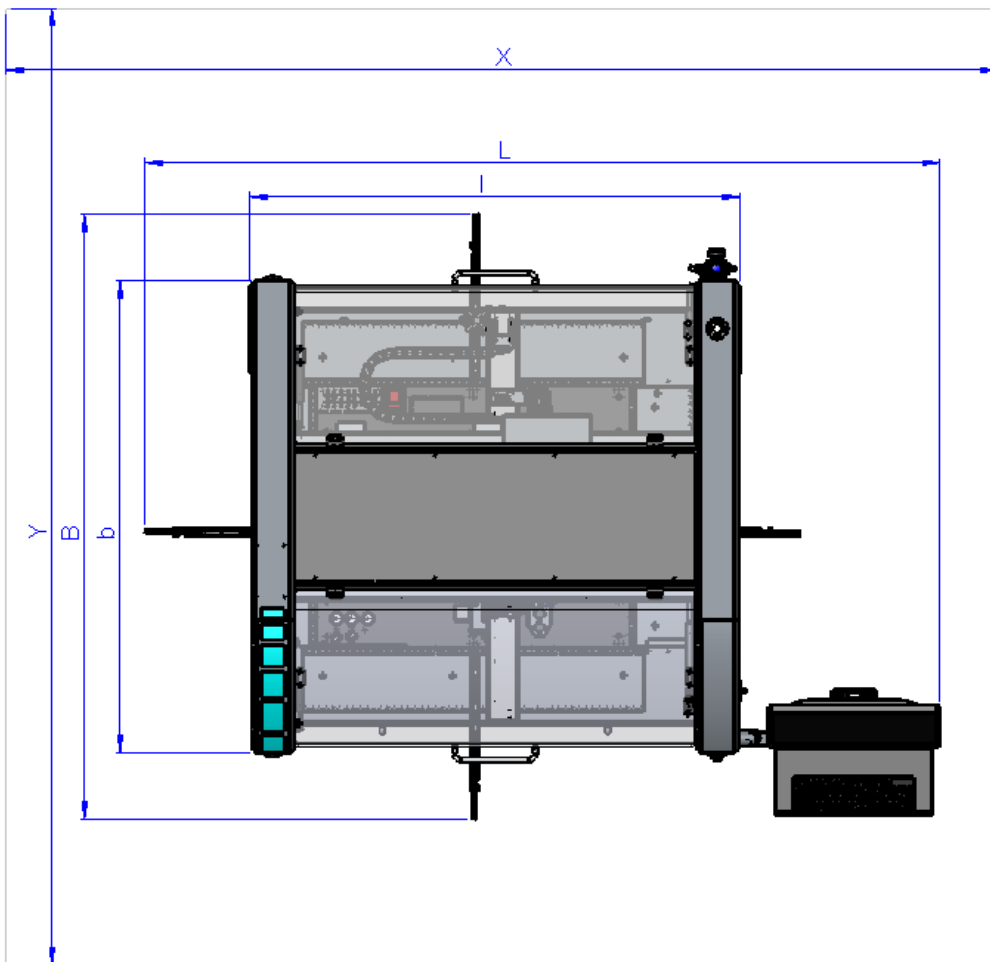
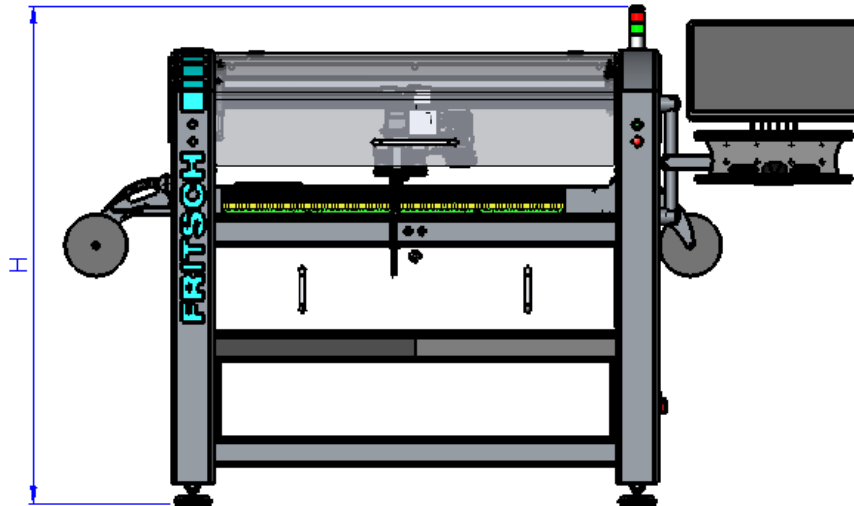
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PA620(L)

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PA610XL



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