

Autopilot stacker truck 1.6 ton

BT staxio *AUTOPILOT* SAE160



Autopilot stacker truck

Specifications					SAE160 (Duplex Tele)	SAE160 (Triplex Hi-Lo)
Identification	1.1	Manufacturer			Toyota	
	1.2	Model			SAE160	
	1.3	Drive			Electric	
	1.4	Operator type			Automatic/Pedestrian	
	1.5	Load capacity/rated load	Q	kg	1600/1470 ¹⁾	
	1.6	Load centre	c	mm	600/650 ¹⁾	
	1.8	Load distance, centre of support arm wheel to face of forks	x	mm	See battery and options dependent table	
	1.9	Wheelbase	y	mm	See battery and options dependent table	
	Weight	2.1	Service weight incl battery		kg	1513
2.2		Axle load, with load: Drive/Castor/Support arm wheel		kg	353/739/2033	679/419/2205
2.3		Axle load, without load: Drive/Castor/Support arm wheel		kg	361/680/472	448/679/570
Wheels	3.1	Drive/Castor/Support arm wheel			Vulkollan®/Polyurethane/Vulkollan®	
	3.2	Wheel size, front		mm	Ø 230x70	
	3.3	Wheel size, rear		mm	Ø 85x95	
	3.4	Additional wheels (dimensions)		mm	Ø 125x50	
	3.5	Wheels, number front/rear (x = driven wheels)			1x+2/2	
	3.6	Track width, front	b ₁₀	mm	585	
	3.7	Track width, rear (width over forks 520/570)	b ₁₁	mm	339/390	-/390
Dimensions	4.2	Height, mast lowered	h ₁	mm	1737	2162
	4.3	Free lift	h ₂	mm	-	1592
	4.4	Lift movement	h ₃	mm	2263	4613
		Lift height	h ₂₃	mm	2350 ²⁾	4700 ²⁾
	4.5	Height, mast extended	h ₄	mm	2892	5316
	4.9	Height of tiller in drive position, min./max.	h ₁₄	mm	1150/1385	
		Height with scanner	h ₂₀	mm	2381/2969	
		Height scanner eye	h ₂₁	mm	2362/2950	
	4.15	Height, fork lowered	h ₁₃	mm	87,5	
	4.19	Overall length	l ₁	mm	See battery and options dependent table	
	4.20	Length to face of forks	l ₂	mm	See battery and options dependent table	
	4.21	Overall width	b ₁	mm	930	
	4.22	Fork dimensions	s/e/l	mm	70/180/1250	
	4.25	Width over forks	b ₅	mm	520/570	-/570
	4.26	Distance between support arms	b ₄	mm	212/262	-/262
	4.31	Ground clearance, with load, below mast	m ₁	mm	17,5	
4.32	Ground clearance, centre of wheelbase	m ₂	mm	24,5		
4.35	Turning radius	W _a	mm	See battery and options dependent table		
Performance data	5.1	Travel speed, drive wheel/fork direction, manual mode with platform		km/h	6,0/6,0	
		Travel speed, drive wheel/fork direction, manual mode		km/h	2,0/4,0	
	5.1.1	Travel speed, drive wheel/fork direction, automatic mode		km/h	8,0/1,1 ³⁾	
	5.2	Lift speed, with/without load		m/s	0,17/ 0,34	
	5.3	Lowering speed, with/without load		m/s	0,46/0,41	
	5.8	Max. gradeability, with/without load		%	6/10	
5.10	Service brake			Electromagnetic		
Electric motor	6.1	Drive motor rating S2 60 min		kW	1.8	
	6.2	Lift motor rating at S3 10%		kW	3	
	6.4	Battery voltage/nominal capacity K ₅ Lead-acid		V/Ah	24/500	
		Battery voltage/nominal capacity K ₅ Li-Ion		V/Ah	24/300	
	6.5	Battery weight		kg	345-403	
Others	8.1	Type of drive control			Variable AC	
	8.4	Sound level at the driver's ear according to EN 12 053		dB (A)	<70	
		Safety of laser products			Class 1 (EC 60825-1)	
		Height from floor to upside battery rollers		mm	140	
		Height from floor to centre of autocharging plate		mm	359	
	Distance centre of fork wheel to centre of autocharging plate		mm	1121	1104	

n) = New value / text since previous version of the data sheet.

1) Load centre 650 mm in automode

2) Max height of load station in automode is h₂₃ - 200mm

3) 5,1 km/h with optional safety scanner in fork direction.

All data are based on table configuration. Other configurations may give other values.

Truck performance and dimensions are nominal and subject to tolerances.

Toyota Material Handling Manufacturing Sweden AB products and specifications are subject to change without notice.

Battery and options dependent dimensions

Dimensions			Large Battery compartment	DX Tele mast		TX Hi-Lo mast	
	Fork length		mm	1250	1650	1250	1650
1.8	Load distance	x	mm	657	979	640	962
	Load distance, with safety scanner rear	x	mm	657	979	640	962
1.9	Wheelbase	y	mm	1452	1752	1452	1752
	Wheelbase, with safety scanner rear.	y	mm	1452	1752	1452	1752
4.19	Overall length ⁴⁾	l_1	mm	2311	2711	2327	2727
	Overall length, with safety scanner rear. ⁴⁾	l_1	mm	2311	2711	2327	2727
4.20	Length to face of forks.	l_2	mm	1061	1061	1078	1078
	Length to face of forks, with safety scanner rear.	l_2	mm	1061	1061	1078	1078
4.35	Turning radius	Wa	mm	1767	2089	1767	2080
	Turning radius, with safety scanner rear.	Wa	mm	1767	2089	1767	2080
	Distance centre of fork wheel to centre of autocharging plate		mm	1121	1443	1104	1426

4) Mechanical fork bumper will extend forks 41 mm

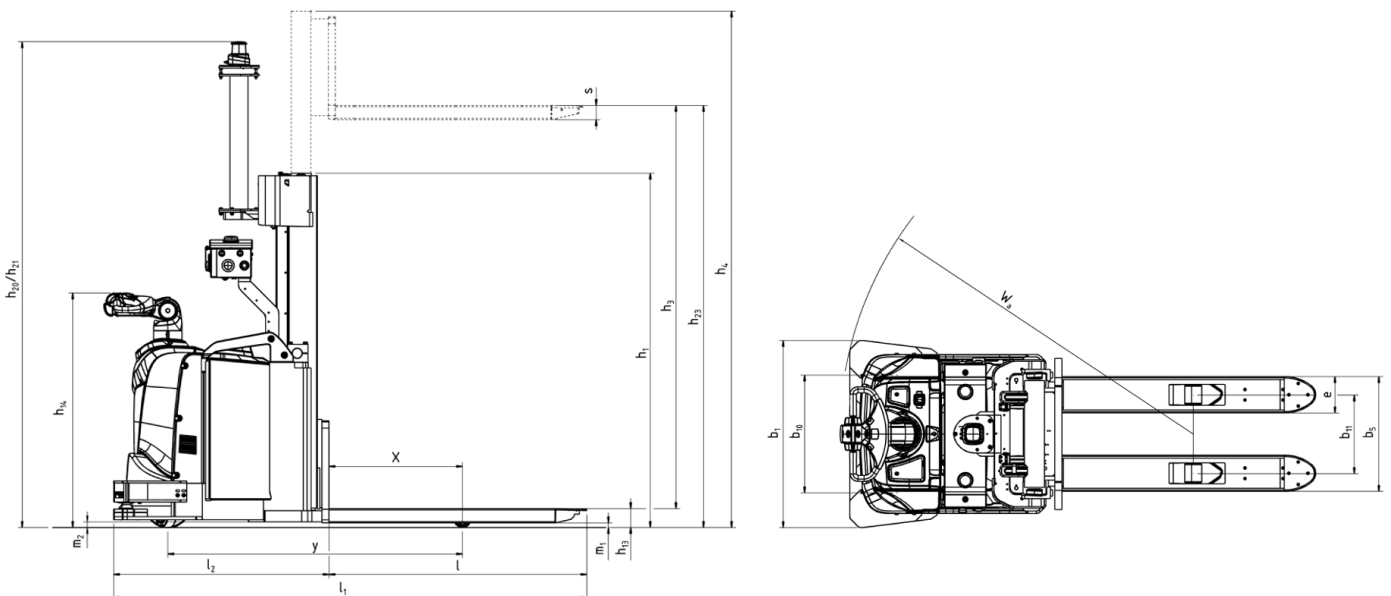
Aisle width Auto mode

SAE160 Large batt. compartment Short side handling	A _{st} Rotate on point. PPS muted			
	Load width	mm	800	800
	Load length	mm	1200	1600
	PPS in fork direction			
DX Tele	Yes	mm	2682	3061
	No	mm	2682	3061
TX Hi-Lo	Yes	mm	2696	3076
	No	mm	2696	3076

Lift capacities

Actual Capacity (kg)

Model	SAE160			
Battery compartment	Large			
Mast type	Dx Tele		Tx HiLo	
Width over forks WOF (mm)	520/570		570	
Load center LCP (mm)	650	850	650	850
Lift height h_{23} (mm)				
2350	1470	1130	1470	1130
2850	-	-	1470	1130
3500	-	-	1100	850
4300	-	-	760	580
4700	-	-	690	530



Truck features:

- Automatic — loading and unloading
 - horizontal transport
 - horizontal deep stacking
- Manual handling
- Laser precision navigation
- Personal safety protection drive direction
- Personal safety protection along sides
- Personal safety protection fork direction (optional)
- Obstacle detection, top (optional)
- Obstacle detection, front (optional)
- Mechanical fork bumper (optional)
- Auto charging Lithium Ion battery (optional)
- Barcode scanner (optional)
- Load detection & fork tip sensors
- Information display
- Electronic regenerative braking system
- Sideway battery change

Other features are available on request.



TP-Technical Publications, Sweden — 746908-040, version 16, 2023-01-16

TOYOTA