

3 Technical data and assemblies

3.1 Overview of technical data

3.1.1 Placement head configuration - optimum values

Placement Head	CP14	CP12	CP12/PP	CP6/PP	TH
E-Component Range	01005 to 6 x 6mm	01005 to 18.7 x 18.7 mm	01005 to 45 x 98 mm	0201 to 45 x 98 mm	0201 to 200 x 110 mm
E-Component Height	4 mm	7.5 mm	19 mm ^{*a}	19 mm ^{*b}	25 mm
E-Accuracy (3 σ)	41 μ m	41 μ m	40 μ m	40 μ m	40 μ m
E-Speed	45,300 cph	24,300 cph	24,200 cph	13,700 cph	5,200 cph

*a) One nozzle of CP12 is removed. 8.5 mm if no nozzle of CP12 is removed.

*b) One nozzle of CP6 is removed. 8.5 mm if no nozzle of CP6 is removed.

3.1.2 Placement machine - optimum values

Placement Machine	SIPLACE E				
	CP14	CP12	CP12/PP	CP6/PP	TH
Heads					
Board format (length ^{*a} x width)	1200 mm x 460 mm				
Feeder capacity	120 x SIPLACE SmartFeeder 8 mm E				
PCB thickness	0.3 - 4.5 mm				
PCB weight ^{*b}	up to 2 kg				
Air Consumption	90 NL/Min.	90 NL/Min.	140 NL/Min.	140 NL/Min.	185 NL/Min.
Machine dimension (L x W) ^{*c}	1,500 mm x 1,666mm				
Machine weight ^{*d}	1,850 kg				

*a) With „Long board“ option

*b) The board weight value refers to the weight of the board plus the weight of the components

*c) Without changeover table or fixed table

*d) Single sided machine

3.1.3 Component camera configuration

Placement head 1	Component Camera 1		Placement head 2	Stationary Component Camera 1 ^a	Stationary Component Camera 2 ^b
SIPLACE CP14	Type 23 GigE		--	--	--
SIPLACE CP12	Type 30 GigE		--	--	--
SIPLACE CP12	Type 30 GigE		SIPLACE PP	Type 36 GigE	Type 25 GigE
SIPLACE CP6	Type 30 GigE		SIPLACE PP	Type 36 GigE	Type 25 GigE
--	--		SIPLACE TH	Type 36 GigE	Type 25 GigE

^a)a Optional, type 33 GigE

^b)b Optional

3.1.4 Component feeding

Feeder locations	
Changeover table with 60 tracks	60 feeders with SIPLACE SmartFeeder 8mm E
Fixed table with 60 tracks	60 feeders with SIPLACE SmartFeeder 8mm E
Changeover table changeover time	< 1 minute
Max. component feeding	
SIPLACE E double sided	120 locations for feeders with SIPLACE SmartFeeder 8mm E
SIPLACE E single sided	60 locations for feeders with SIPLACE SmartFeeder 8mm E
Feeder module types (SIPLACE E)	SIPLACE SmartFeeder E SIPLACE StickFeeder E Manual Tray holder E (Speed) Manual Tray holder E (Flex) SIPLACE JTF-MW
Feeding capacity (2 change over tables on the SIPLACE E)	120 tape feeder modules, SIPLACE SmartFeeder 8 mm E 60 tape feeder modules, SIPLACE SmartFeeder 2x8 mm E 60 tape feeder modules, SIPLACE SmartFeeder 12 mm E 60 tape feeder modules, SIPLACE SmartFeeder 16 mm E 40 tape feeder modules, SIPLACE SmartFeeder 24 mm E 30 tape feeder modules, SIPLACE SmartFeeder 32 mm E 24 tape feeder modules, SIPLACE SmartFeeder 44 mm E 20 tape feeder modules, SIPLACE SmartFeeder 56 mm E

3.1.5 PCB conveyor - data

Single conveyor	
Standard dimensions (length x width)	
With buffering	50 mm x 50 mm to 460 mm x 460 mm
Without buffering ^{*a}	50 mm x 50 mm to 490 mm x 460 mm
With "Long Board"option 1030 (length x width)	
Single step mode	50 mm x 50 mm to 610 mm x 460 mm
Two step mode ^a	50 mm x 50 mm to 1030 mm x 460 mm
With "Long Board"option 1200 (length x width)	70 mm x 50 mm to 1200 mm x 460 mm
Stationary conveyor side	Right, Left
Automatic electrical width adjustment	Standard
PCB thickness	
Standard	0.3 mm to 4.5 mm
PCB warpage	See page 137
PCB weight ^{*b}	
Standard	max. 2.0 kg
Clearance on PCB underside ^{*c}	25 mm
PCB conveyor height	
Standard	900 mm to 930 mm
Option	950 mm
Type of interface:	
Standard:	SMEMA
Component-free PCB handling edge	3.0 mm
PCB changeover time	
Single conveyor	< 1.5 seconds

*a Available at 04/2015

*b The board weight value refers to the weight of the board plus the weight of the components.

*c The free positioning of support pins is limited by the stop bar.

Important notes

When setting up a machine (S; F-, HS-, HF-, X- or D-Series) next to a SIPLACE E, be aware that there is limited room between the two machines. In these cases, use suitable conveyor extensions to create room of 0.5m for the operator between the two machines.