# **SIEMENS**

## The Dotmaster

DIMA is a global integrated engineering company providing the electronics industry with a wealth of experience in the design of pro- customer specific needs, DIMA duction facilities and manufactur-

ing equipment. Using advanced CAD design technology, coupled with a thorough understanding of offers the ideal solution for dispensing soldercream, adhesive and other materials onto PCBs. The Dotmaster can be used as an airpulse dispenser when combined with the optional positive

displacement pump. For prototypes of circuitboards the Dotmaster can be converted into a nc PCB drilling machine.

## Key Features

- 10.000 dots / hour
- easy to use Windows™ user interface
- automatic optimization
- possible CAD download
- quick change PCB holder
- optional alligning camera with monitor



Siemens Nederland N.V. **ESD Services** Remmerden 5 3911 TZ Rhenen P.O. Box 129 3910 AC Rhenen The Netherlands Phone +31 31 739 87 87

+31 31 739 87 80

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## Distance holder

Dispensing needle with distance holder to ensure fixed distance between needle and PBC. The snap-on distance holder can easily be adjusted in hight.

## User interface

DIMA's software offers today's customer the ability to produce complex products giving maximum flexibility, lower processing cost and higher yields. Its unique capabilities offer quick, responsive, and informative one key operation

drastically reducing programming time. All required information about can be visiualised with an on reference points, test dots, and dispense co-ordinates is available in one window. Dispense co-ordinates are automatically optimized for a minimum of production time.

The routing of the dispense head screen graphical plot function of the software. Also available are DIMA's CAD conversion utilities which can reduce programming time to minutes.





## Airpulse dispense

Standard the Dotmaster comes as an Airpulse dispenser to be used for products with a low viscosity or for products with a higher viscosity and a less critical aplication. Syringe holder fits 5 and 10cc syringes.

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## Positive displacement

The optional positive displacement The Optional drill head for drilling precision dispensing pump, allows you to dispense all kinds of materi- with the dispense head within minals with a constant dot size. Changes of temperature or viscosity of the product have less influence on the dot size. Pump fits 5, 10 and 30cc syringes.

## PCB drill

prototype PCBs can be changed utes.

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## **Dotmaster Specifications**

#### Dimensions

 $L \times W \times H = 700 \times 700 \times 680 \text{mm} / 27.5 \times 27.5 \times 27$ "

#### PCB size

400 x 600mm / 15.7 x 23.6", Max. dispense area 320 x 420mm / 12.6 x 12.6" top clearance 23mm / 0.9", bottom clearance 13mm / 0.5"

#### Maximum Warpage

1mm up - 1mm down
(when working with distance holder)

#### Motion

Steppermotor controlled belt driven

### Control

Integrated microprocessor controller combined with MS-Windows  $^{\rm TM}$  PC software

### Dispense speed

10.000 dots / hour at 1mm centres, 30ms dispense and 100ms hold time, 5mm dispense height

### Ordering information

SMDU-5000 DOTMASTER with laser pointer
SMDU-5001 DOTMASTER with camera + monitor
SMDU-5100 Positive displacement pump
SMDU-5200 Drill motor for PCB drilling

#### Interface

RS-232 serial interface

#### Power-Air requirement

115 or 230 Vac / 50- 60 Hz / 125 Watt 4 Bar / 60 PSI

#### Operating temperature

18-30 °C

### Noise level

Noise emission during operation < 70 dB(A)

### Weight

69 Kg

	Resolution	Teach Accuracy	Repeatability
X Axis	0.10 mm / 0.004"	0.10 mm / 0.004"	0.05 mm / 0.002"
Y Axis	0.10 mm / 0.004"	0.10 mm / 0.004"	0.05 mm / 0.002"
7 Axis	0.10 mm / 0.004"	0.10 mm / 0.004"	0.08 mm / 0.003"

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Fax +31 31 739 87 80