

**LASER MARKING SYSTEM**



**DPL*Magic* Marker**  
**The Diode-pumped Laser Marking System**  
**by cab**

# DPL*Magic* Marker

**The Diode-pumped Laser System by cab – provides clear and permanent marking.**



**Marking-laser with tabletop-housing for small parts**

## **Innovative**

Through the use of the most modern technology the DPL*Magic* Marker sets new standards in laser-marking. The extremely high-quality beam and pin-point performance ensure marking onto the most diverse of materials.

## **Air-cooled**

The DPL*Magic* Marker incorporates thermoelectric cooling. Modern switching technology reduces losses so significantly that cumbersome cooling methods are not necessary.

## **Economic**

Due to an average power consumption of only 200 Watts the energy costs are very low.

## **Precision**

The precision focus of the laser-beam provides marking to a resolution up to 1000 dpi: the pre-requisite for 2D miniature barcodes and high definition graphics.

## **Speed**

The high-speed scanning head, FireSCAN, delivers fast and precise marking and guarantees high positioning accuracy of the laser-beam.

## **Robustness**

The DPL*Magic* Marker is designed for long-service, industrial, multi-shift operation.

## **Service and User-friendly**

The integrated diagnostics permanently show equipment status on the display. Faulty components can be quickly and easily exchanged.

## **Marking Software**

The programming language - Visual Basic for Applications - and the speed of 32 bit technology offer endless possibilities. The user is able to produce very complex marking formats through the assistance of a comprehensive library of commands and the customer specific user-interface.

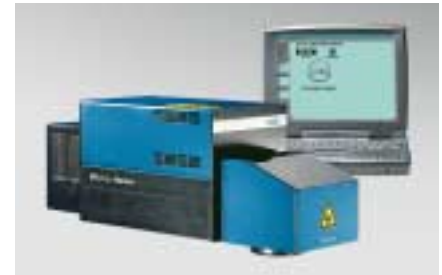
Screen-masks may be prepared to suit the needs of the individual customer. The integrated preview function of the software and the built in Pilot-laser further assist the user. Operating systems: Windows 98, 2000 or NT.

## **Marking by carbonization/oxidation**



### Top technology in miniature format

At 583 mm length and less than 20 kg the DPL*Magic* Marker is the smallest laser in its class.

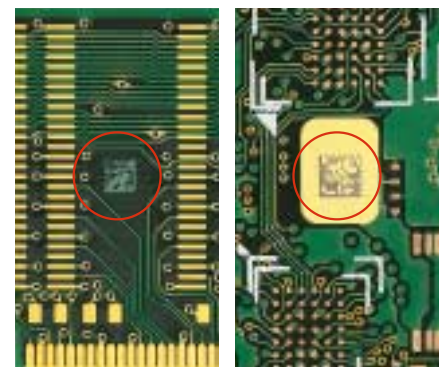


#### Direct plastics marking

#### Paint removing

#### Laser engraving

#### Marking of PCBs



The scan head can be turned in both directions by 100°.



## Technical Data

### Laser source

Diode pumped solide state laser  
(Nd:YAG)

Wave length	1064 nm
Beam mode	TEM oo
cw Power	3 Watt
Pulse frequency	0,1- 50 kHz
Pilot laser	650nm/3mW
Laser protection class	4

### Scan head

Scan speed up to 5 m/sec or  
350 characters/sec. with a height of 1 mm,  
Single-Line-Font

Focusing optic: F-Theta-Lens

Focal length	100	163	254
Marking area in mm	70x70	110x110	180x180
Spot Ø in µm	25	35	50
△ Resolution in dpi	1000	725	500

### Pilot laser beam

All systems are equipped with a pilot laser  
beam.

### Interfaces

PC-Interface Serial: RS-232 C

SPS-Interface for:

Laser operation ready, Start of marking,  
End of marking, Laser emission,  
Shutter emission, Shutter interlock

Socket for power supply with integrated fuse

### Operating voltage

85-260 VAC/16A/50-60 Hz

### Power consumption

typ. 250 W/max. 500 W

### Environmental conditions

Operating 15-35°C  
Humidity 30-85 %, not condensing

### Weight

18 kg

## Marking software

### Hardware requirements

Pentium II-PC with 233 MHz and 64 MB RAM

Operating system WINDOWS® 98/2000/NT

### Characters formats and alignments

True-Type-Fonts filled, unfilled and Single-Line-  
Fonts. All can be stretched, compressed, mir-  
ror inverted and rotated.

### Graphic elements

Line, rectangle, rounded rectangle, rectangle  
and circle filled or unfilled



### Graphic formats

HPGL direct, DXF can be handled by an  
optional CAD programme.

### Barcodes

2 of 5 Codabar  
CODE 39, CODE 93 EAN 8, 13  
CODE 128 A,B,C EAN/UCC 128

### Two dimensional barcodes

Data Matrix, PDF 417

All barcodes can be scaled free. Optionally  
marked with test code, inverted, start-/stop-  
code.

### Additional features

Serial number, date, time

Extensive help menu and functions

Possibility to progress variables and sub-  
routines

Input of complete data and text strings. With  
OLE data links operation with data bases by  
MS-Access or tables by MS-Excel.

Complete procedures and parameters can be  
saved in a file or in a configurable menu.

Programmable laser parameters

Connection to industrial control units, e. g.  
axis controllers for X, Y, Z, or ROT axis.

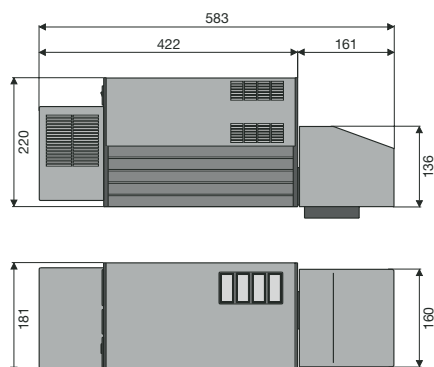
Description	Focal length	Part No.
DPL <i>Magic</i> Marker 100	100	5523214
DPL <i>Magic</i> Marker 163	163	5523215
DPL <i>Magic</i> Marker 254	254	5523216

## Content of delivery

- Laser marking system with pilot laser beam
- Marking software *MagicMark*
- Power supply cable and data cable
- User and programming manuals

## Periphery

- Height adjustable Z-Axis
- Laser protection case
- Turn table 2 x 180°
- Aspiration
- Customized adaptations and automatic  
solutions on request



Subject to technical alterations.



## 25 Years of Development and Production Made in Germany



cab Headquarter in Karlsruhe

For 25 years cab has developed and manufactured product marking equipment and systems for the industry and distribution.

The constantly growing market demands innovative ideas that will characterize the products of tomorrow.

Our engineers offer competent support for your solutions.

Our reliable and skillful production team manufactures in our modern plant (Sömmerda/Thuringia) from the single component up to the complete marking facility on time.

Our staff at cab guarantees that from the goods-inward check to the shipping of the final product quality control is monitored.





cab-Produkttechnik  
Gesellschaft für  
Computer- und Automations-  
Bausteine mbH & Co KG

**cab Germany:**

cab-Produkttechnik  
GmbH & Co KG  
Postfach 1904  
D-76007 Karlsruhe  
Wilhelm-Schickard-Straße 14  
D-76131 Karlsruhe  
Telefon +49 721 66 26-0  
Telefax +49 721 66 26-259  
<http://www.cabgmbh.com>  
E-Mail [info@cabgmbh.com](mailto:info@cabgmbh.com)

**cab France:**

cab technologies s.à.r.l.  
4, Impasse Godar  
F-67350 Niedermodern  
France  
Téléphone +33 388 72 25 01  
Télécopie +33 388 72 25 02  
<http://www.cab-technologies.fr>  
E-Mail [info@cab-technologies.fr](mailto:info@cab-technologies.fr)

**cab U.K.:**

cab Technology Ltd.  
12 South Bank, Abbots Park  
Chester CH1 4BB  
United Kingdom  
Phone +44 1244 380 686  
Fax +44 1244 380 686  
<http://www.cabgmbh.com>  
E-Mail [uk@cabgmbh.com](mailto:uk@cabgmbh.com)

**cab USA:**

cab Technology, Inc.  
90 Progress Avenue Unit 2  
Tyngsboro, MA 01879  
USA  
Phone +1 978 649 0293  
Fax +1 978 649 0294  
<http://www.cabtechn.com>  
E-Mail [cabtechn@sprynet.com](mailto:cabtechn@sprynet.com)

**Representatives in other countries on request.**