

## FEATURES



### USED BY:

- SHIPYARDS
- STEEL PLANTS
- MILITARY
- MANUFACTURERS OF:
  - WHITE GOODS
  - MOTORS
  - AUTOMOTIVE COMPONENTS
  - LIFTS
  - PUMPS
  - CRANES
  - FIRE DOORS
  - LOGGING INDUSTRIES
- LOGISTICS MANAGEMENT
- POWER AND UTILITY COMPANIES

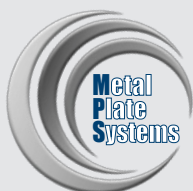
### IDEAL FOR:

- CABLE / HOSE TAGS
- INVENTORY / ASSET CONTROL AND TRACKING TAGS FOR:
  - HARSH ENVIRONMENTS
  - WORK IN PROGRESS
  - COMPONENT ID
  - HEAT-TREATED PROCESS
  - SERIAL NUMBER TAGS
  - INDUSTRIAL SAFETY TAGS

## SOFTWARE



Support barcode 2D encodation data  
ActiveX Controls for the barcode  
generation  
Hardlock protection key



# METAL DOT MATRIX SERIES MDM 1000 - 2000 2D DATA MATRIX

## 2D Data Matrix



**MDM 2000 2D Data Matrix**  
IS NOW ABLE TO MANAGE  
MULTIPLE FONTS EASILY.  
It works with  
**up to 3 different fonts.**

## DOT PEEN METAL MARKING SYSTEM WITH 2D DATA MATRIX BARCODE

2D DATA MATRIX BARCODE THE GREAT ADVANTAGE  
OF HAVING A LOT OF INFORMATION ON A SMALL SPACE.  
PRECISE, PERMANENT AND TAMPER-PROOF MARKING.

- ✓ Ideal for harsh post marking treatment of tags like sanblasting, painting etc.
- ✓ PVC or Mylar tags need to be regularly replaced causing lost time, identification error and high consumables costs.
- ✓ Tags are required to have a long working life and will be subjected to enviromental degradation
- ✓ Application where marking the component or items directly:
  - affect its mechanical integrity
  - is too difficult to achieve
  - is too costly (laser dot peen)
  - too time consuming affecting production efficiency



# FEATURES AND SPECIFICATIONS

## 2D ENCODING AREA

ECC200 BARCODING		
Row & Col.	Number Only	Alphanumeric
10x10	6	3
12x12	10	6
14x14	16	10
16x16	24	16
18x18	36	25
20x20	44	31
22x22	60	43
24x24	72	52
26x26	88	64

\*Total area depends on dot size



2D Data Matrix Barcode Reader  
DNR-7500V-00  
CIM P/N C7010972

**MDM1000**  
**2D Data Matrix**

**MDM2000**  
**2D Data Matrix**



## PLATE CAPACITY

### dimensions

width: 30 ÷ 115 mm / 1.18 ÷ 4.53 in - only MDM1000 2D Data Matrix up to 180 mm / 7.092 in  
height: 21 ÷ 90 mm / 0.83 ÷ 3.54 in - only MDM1000 2D Data Matrix up to 110 mm / 4.334 in

### thickness

0.4 ÷ 0.9 mm / 0.0157 ÷ 0.0354 in

### materials

alluminium, copper, and brass

### input hopper

MDM1000 2D Data Matrix: manual feed - Single Access Point  
MDM2000 2D Data Matrix: up to 250 plates capacity. (Ø 0.4 mm/0.0157 in)

### output hopper

MDM1000 2D Data Matrix: manual feed  
MDM2000 2D Data Matrix: up to 250 plates capacity. Options: FIFO (first in - first out) technology or side eject

## STAMPING

### technology

micro percussion using a stylus in Widia steel - marking pressure adjustable depending on the material to be stamped (STANDARD FORCE 500 N)

### resolution

200 DPI

### fonts

standard windows fonts including special characters and symbols

### logos

MDM2000: manages up to 3 different fonts each job

### lay out facilities

up to 2 at a time, resident in equipment. Max area about 84 cm<sup>2</sup> / 13 square in

### stamping area

fonts and logos can be rotated 90°/180°/270°  
full plate except for 1 mm / 0.039 in from the top and left/right edges and 7 mm / 0.28 in from the bottom edge. Avoid edges in order to not damage the stylus

### 2D embossable area

See table beside (2D ENCODING AREA)

### performance

Plate types	Card production time	Production time
18x18: 23 alphanumeric char. data	245" each plate (120" for 2D)	30 cph
16x16: 5 numeric char. data	190" each plate (65" for 2D)	55 cph
14x14: 5 numeric char. data	152" each plate (27" for 2D)	130 cph

## COMMUNICATION INTERFACE AND SOFTWARE

### communication interface

RS232 serial port

### protocols

CIM, Xon-Xoff, MultiEmbosser e Pound-Pound

### operating system

Sword PC application proprietary software compatible with Windows 2000/XP/Vista/7

### application software

automatic data field; plate archive; DBIII, DBIV, Excel, MS Access file compatibility; self diagnostic, automatic repetition of faulty plate personalization, resetable and non-resetable counters

### LCD Edit

via external keyboard; 20 storable formats downloadable

### data format

50 fields of 80 characters each (Variable, Fixed data, Counters, etc.)

## HARDWARE

### power supply

100 - 117 - 220 - 230 o 240 Volt - 50 o 60 Hz

### power consumption

100 Watt

### operating environment

temperature: 5 ÷ 40° C / 41 ÷ 104 °F

relative humidity: 30% ÷ 90% non condensing

### dimensions (WxDxH)

MDM1000 2D Data Matrix / MDM2000 2D Data Matrix: 630 x 740 x 380 mm / 24.8 x 29.1 x 15 in

### peso

MDM1000 2D Data Matrix - 54 Kg / 119 lbs - MDM2000 2D Data Matrix - 57 Kg / 126 lbs

## VARIOUS

### LCD display

2 lines of 40 characters LCD display for diagnostics and offline operation

### FLASH memory technology

for easy firmware upgrade operation

### Others

Lithium back up battery; security operation with key lock; machine status indicator lights; near end input / near full output hopper plate sensors for continuous production (MDM2000 2D Data Matrix); visual alarm kit for operator alert

**VERSATILE** The dot peening thecnology makes the **MDM1000 / 2000 2D Data Matrix** one of the most versatile marking solutions for metal plates, since it allows total freedom in designing the plate layout.

**EASY AND FLEXIBLE** Manual (**MDM1000 2D Data Matrix**) or automatic (**MDM2000 2D Data Matrix**) loading and unloading has never been easier. Equipped with a unique clamp for plates of most dimensions and metals, the **METAL DOT MATRIX** are deisgned to meet most requirements in metal plate marking.

**CIM** has developed various command protocols allowing the **MDM1000 / 2000 2D Data Matrix** to easily interface with custom applications.

cim-usa.com

