Datacard® 9000/7000 Series Card Issuance System
LaserGrafix™ Laser Engraving Module

The LaserGrafix™ laser engraving module lets you combine the security and durability of laser engraving technology with the inline efficiency of the Datacard® 7000 and 9000 Series card issuance systems. It permanently engraves photos, text, micro-text, bar codes, logos, signatures and other black-and-white images directly on both the front and back side of commonly used card materials.

Physical Attributes

Maximum Engraving Speed

- Text: up to 1200 cph in vector mode
- Photo images: up to 250 cph
- Bar codes: up to 600 cph in vector mode

Print resolution

- Up to 1200 dpi

Dimensions

- Height: 117 cm (46 in.)
- Width: 51 cm (20 in.) (note: double width module)
- Depth: 64 cm (25 in.)
- Clearance required at back for ventilation: 45.7 cm (18 in.)

Weight

- 88 kg (194 lbs)

Power Requirements

- 30 Amps nominal
- 240V, 50/60 Hz
- 192V AC to 248V AC
- Single-phase, 3-wire conductor

Ambient Operating Environment

- Temperature: 15°C - 32°C (60°F to 90°F)
- Relative Humidity: 20% to 80% (non-condensing)

Noise

- Not to exceed 70 dB

BTU

- 824

System Specifications

- Advanced diode-pumped laser technology permeates the inner layers below the plastic card surface and makes alteration or removal of personalisation impossible without destroying the card
- Can be integrated completely inline with other card personalisation and delivery functions
- Engraves photos, text, bar codes, logos, signatures and other black-and-white images
- Supports popular graphic file formats
- Micro-text capabilities
- Multiple bar codes formats
- Text engraving at angles between 0° and 359°
- Card rotation mechanism for engraving both sides of a card

Text

2 modes of text personalisation:
- Vector mode: 12 different proprietary fonts (tactile or smooth)
- Pixel mode uses a dithering process that supports TruType™ (smooth) fonts
- Micro-text engraving (vector & pixel modes)

Graphic Images

(photo & signatures)
- Graphic file formats: including PCX, .JPG, .TIF and .BMP
- Unique software controls allow flexibility to create an unlimited number of laser parameter tables (adjustment of images quality, resolution and size)

Bar Codes

- Selection of the bar code font, bar length and orientation though either the Central Issuance System card set-up or other data
- Vector and pixel modes
- Library: EAN 12, Code 39, Code 128 and Interleaved 2 of 5

Front and Rear Capabilities

- Card rotation capabilities at the entrance and exit of the module give the LaserGrafix™ module the flexibility to personalise the front, back or both sides of the card in a single pass
- Multiple inline LaserGrafix™ modules provide maximum throughput for front and back personalisation on a single card

Card Handling

- Card size: CR-80
- Card thickness: 0.051 mm (0.018 in.) to 0.084 mm (0.033 in.)
- Card flatness: max. allowable bow 2.5 mm (0.100 in.) in any direction
- Material: ABS, composite, laminated & unlaminated PVC, PETG, polycarbonate
- Engraving area: anywhere on the card within 2.54 mm (0.1 in.) from the top or bottom edge, 0.50 mm (0.020 in.) from the left or right edge

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Card Stock

must comply with the following specifications:

- ISO Standard 7810
- ISO Standard 7811, parts 1-5
- ISO Standard 7813
- ISO Standard 7816
- ISO Standard 10202
- ISO Standard 10536
- ISO Standard 11693
- ISO Standard 11694
- JIS X6302 (B9561)
- JIS X6301 (B9560)

Certifications

- CDRH
- UL 1950
- CSA C22.22 M220
- FCC Part 15
- CISPR 22 (EN55055) Class A
- VDE, CE approved

Module Benefits

Powerful Security Features

- Personalisation below the surface of the card prevents alteration
- Vector engraving with tactile feel of text and bar codes

Durable Personalisation

- High quality appearance of photos, text and bar codes ever changes

Efficiency and Flexibility

- Laser personalisation inline eliminates inefficient multiple step card production processes
- Front & rear side engraving with one module
- Quickly change from one laser application to another creating and storing an extensive number of laser setups
- Multiple modules can be used for increased speed

Precision Engraving Resolution

- Micro-text engraving of cardholder data
- High quality photos

Simple Maintenance / Long Life

- LaserGrafix™ light source (the diode) lasts up to 5,000 hours
- The laser diode is easily accessible outside the laser chamber by a trained technician

Production Cost Reductions

- Zero water cooling
- Zero supplies expenses