DATACARD®
MX6000™ CARD ISSUANCE SYSTEM

LASER ENGRAVING MODULE

The laser engraving module on the MX6000 system utilizes the latest in engraving technology to deliver high-speed, high-quality laser imaging of cards. It is capable of engraving variable-sized photos, alphanumeric text, bar codes, black-and-white logos and other graphical elements with exceptional quality.

- State-of-the-art, grayscale laser technology produces high-quality engraved tonal images
- Engraves both the front and back of the card in a single module
- Scalable laser solution integrates multiple modules to meet higher throughput demands
- Supports tilted engraving for enhanced visual security
- Optional vision registration allows precise alignment between engraved elements and preprinted cards
- The solid-state, diode-pumped laser provides powerful technology within a compact module, including power supply and cooling unit

Laser Engraving Module Specifications	
Module Functionality	Engraves text, photos, bar codes and other images on the card surface using laser technology
Rated Speed	Up to 1,500 CPH (Dependent on card data engraved)
Engraving Technology	Air cooled, diode-pumped laser Class 1 Laser Product
Engraving Capabilities	• Pixel engraving: text, photos, bar codes, and other digitized images • Micro-engraving • Tilted image engraving
Resolution	Greater than 400 dpi; grayscale
Laser Engravable Elements	Photos, alphanumeric text, vector text, bar codes, signature, fingerprint, black-and-white logos, graphic images, scrambled indicia, tilted images, ghost images, micro-engraving
Text Formats	Scalable fonts, including TrueType fonts for Microsoft® Windows® operating systems
Bar Code Formats	• One-dimensional (1D): EAN12, Code 39, Code 3 of 9, Code 128, Interleaved 2 of 5, • Two-dimensional (2D): PDF417
Image Formats	JPEG (.jpg), TIFF (.tif), Bitmap (.bmp), PNG (.png)
Laser Engraving Placement	• Front and back of the card • 0.10 in. (2.54 mm) from the top or bottom edge of the card • 0.02 in. (0.50 mm) from the left or right edge of the card • Laser engraving rotation between 0° and 359°
Laser Engraving Accuracy	±0.004 in. (±0.1 mm) in both X and Y axes
Laser Light Source Expected Life	Over 10,000 hours
Micro-Engraving Feature	400-800µm in height
Titled Engraving Feature	• Tilted laser range of +27° to -27° in rotational increments of 1° • Engraving can be placed 0.315 in. (8.0 mm) from any edge on the card
Vision Registration Feature	Optional feature Tolerance: 0.006 in. (0.015 cm) with respect to the vision mark
System Configuration	• Up to 4 modules per system • Cards must be laser engraved before any type of topcoat is applied
Card Types Supported	ISO/IEC 7810 ID-1 Size; 30 mil (±10%)
Card Materials Supported	Laser engraving recommended only for polycarbonate, composite or PVC cards with a special laser layer
Module Dimensions	50.1 in. H x 10.0 in. W x 27.0 in. D (127.3 cm x 25.4 cm x 68.6 cm)
Weight	155.0 lbs (71.0 kg)
Current Draw	1.33 Amps at 230V
Heat Output	Average of 1,020 BTUs per hour

DATACARD® MX6000™ CARD ISSUANCE SYSTEM
LASER ENGRAVING MODULE

Laser Engraving Module Supplies		
Item Number	**Description**	**Approx. Card Yield***
569112-001	Laser cleaning filter, carbon	300,000
569113-001	Laser cleaning filter, particle	300,000
*Yields are estimated. Actual yields may vary.		

DatacardGroup

11111 Bren Road West

Minnetonka, MN 55343-9015

+1 952 933 1223

+1 952 931 0418 FAX

www.datacard.com

CI7-5259