DATACARD® MX SERIES MODULES

LASER 450G MODULE

The laser 450G module is designed for secure government applications. It utilizes the latest in precision control architecture and fiber laser technology to deliver high-speed, fine line detail engraving of variable-sized photos, security features, and alphanumeric text.

- Single controller supports multiple modules in a MX series system
- State-of-the-art, grayscale laser technology produces high-quality tonal images
- Security features engraved at time of personalization (S.T.O.P) offer unique elements that are extremely difficult to replicate
- Engraves both the front and back of the card in a single module
- Supports CLI (vertical tilted engraving) and MLI (horizontal tilted engraving) for enhanced visual security
- Vision registration camera allows precise alignment between engraved and preprinted elements on the card
- Air-cooled fiber laser provides powerful technology within a compact module, does not require an external power or cooling unit
- Scalable laser solution integrates multiple modules to meet higher throughput demands

Module Functionality	Engraves text, photos, bar codes, security features, and other images on the card surface				
Module Functionality	using laser technology				
Engraving Technology	Air-cooled fiber laser; Class 1 Laser Product				
Engraving Capabilities	Pixel engraving: text, photos, bar codes, and other digitized images				
	Vector engraving: text				
	• Micro-engraving				
	Tilted image engraving: CLI, MLI, 3D photo				
	Security features: Laser Tact, PersoCurve, and photo optimization				
Resolution	Up to 3,200 dpi; grayscale				
Laser Engravable Elements	Photos, alphanumeric text, vector text, bar codes, signature, fingerprint, graphic images, scrambled indicia, tilted images, ghost images, micro-engraving				
Text Formats	Scalable fonts, including TrueType and OpenType fonts for Microsoft® Windows® operating systems				
Bar Code Formats	One-dimensional (1D): Code 39, Extended Code 39, HIBC, Codabar, NW7, EAN8, EAN13, JAN8, JAN13, UPCA, UPCE, Bookland, Interleaved 2 of 5, Code 128, EAN/UCC 128, Code 93, MSI Plessey				
	Two-dimensional (2D): QR Code, PDF417, Data Matrix				
mage Formats	JPEG (.jpg), TIFF (.tif), Bitmap (.bmp), PNG (.png), GFF (.gif)				
Laser Engraving	Front and back of the card				
Placement	• 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 axis				
Micro-Engraving Feature	0.4 - 0.8mm in height				
Tilted Engraving Feature	Tilted laser range: • Vertical axis ± 30°				
	• Horizontal axis ± 20°				
	• 3D image ± 10° (either vertical or horizontal axis may be used)				
	Tilted engraving placement: • 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				
Card Types Supported	ISO/IEC 7810 ID-1 Size: 30 mil (±10%) Alternative card thicknesses can be made available upon request				
Card Materials Supported	Laser engraving recommended for polycarbonate, composite, or PVC with special layer. Limitations may exist for each personalization technology.				

Fume Extraction Gen 2 System			
Recommended	When engraving PVC cards		
Usage	One extraction system for every 2 laser modules		
Dimensions	46.49 in. H x 20.78 in. W x 18.30 in. D (118.1 cm x 52.8 cm x 46.5 cm)		
Weight	156.0 lbs (70.0 kg)		
Voltage	230V max, 208V nominal +/- 10%		
Max Flowrate	460m3/h		
Wattage	1.3 kW		
Frequency	50/60 Hz		

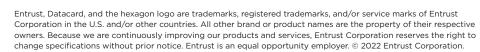


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Available Systems	MX9100™ System	MX8100™ System	MX6100™ System	MX2100™ System
Rated Speed	Up to 4,000 CPH (Actual throughput dependent on the card layout, material, and number of modules)	Up to 3,000 CPH (Actual throughput dependent on the card layout, material, and number of modules)	Up to 1,800 CPH (Actual throughput dependent on the card layout, material, and number of modules)	
Allowed Quantity	Up to 6 modules per system		Up to 4 modules per system	
Module Configurations	Not applicable	Alata di Ilia		
System Considerations	Not applicable	Cards must be laser engraved before any type of laminate or topcoat is applied Requires Controller Software v10.5 or higher		Not Available See the Laser 430G Module data shee
Module	50.1 in. H x 10.0 in. W x 27.0 in. D	-		
Dimensions	(127.3 cm x 25.4 cm x 68.6 cm)			
Weight	155.0 lbs (71.0 kg)			
Current Draw	1.51 Amps at 230V			
Heat Output	Average of 1,187 BTUs per hour			



Learn more about the MX Series at entrust.com



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