

## **BARREL SMART CARD PERSONALIZATION MODULE GEN 2**

The Barrel Smart Card Module Gen 2 personalizes contact, contactless, dual interface, and hybrid cards in the same module with impressive speed, accuracy, and security. The module architecture allows for the growth of smart card capacity needed to accommodate longer encoding times without limiting system throughput. This dual interface module eliminates the need for separate contact and contactless smart card modules in a system.

- A single module can be used to personalize contact, contactless, dual interface (combination), and hybrid cards in a single programming station
- Issuers may choose from a variety of different couplers based on operational needs and brand preference: Datacard or Smartware
- Depending on coupler brand, Adaptive Issuance™ Suite Software may be included

### **Barrel Smart Card Personalization Module Gen 2 Specifications**

<b>Module</b>	Enables the personalization of contact, contactless, dual interface (combi), and hybrid smart card chips
<b>Couplers</b>	Couplers: up to 4 per module Heads: up to 24 contact heads or up to 12 contactless heads Datacard® heads only: module will support a combination of 12 contact and 12 contactless/dual heads
<b>Coupler Type</b>	Datacard® and Smartware USNano® smart card couplers currently available
<b>Frequencies Supported</b>	<ul style="list-style-type: none"> <li>• Contact — up to 20 MHz</li> <li>• Contactless/Dual — 13.56 MHz</li> </ul>
<b>Communications Speed</b>	<ul style="list-style-type: none"> <li>• Contact — up to 20 Mbps for the hardware, limited to 5 Mbit in ISO 7816-3/4 communication</li> <li>• Contactless/Dual — 106, 212, 424 and 847.5 Kbps</li> </ul>
<b>Supports Server-Based Application Environment</b>	<ul style="list-style-type: none"> <li>• Server-based application environment is supported with Datacard® and Smartware couplers</li> <li>• Loaders and interpreters available and supported: Adaptive Issuance™ Suite Software</li> <li>• Personalization applications and scripts available and supported: Mastercard PayPass®, Mastercard M/ Chip®, Visa® Contactless, American Express® ExpressPay, and all other major smart card applications</li> <li>• Full PPS is supported in this environment</li> </ul>
<b>Supports Embedded Application Environment</b>	<ul style="list-style-type: none"> <li>• Embedded application environment is available using the Smartware USNano®; “ISO-Mode” is available, which allows the developer to choose parameters within the supported ISO standards</li> <li>• Loaders, interpreters, scripts, and applications are not provided by Entrust for this environment; they are the responsibility of the application developer</li> <li>• Full PPS is supported in this environment</li> </ul>
<b>Compatible Software</b>	Adaptive Issuance™ Suite Software
<b>Protocols Supported</b>	<ul style="list-style-type: none"> <li>• ISO 14443 Type A, Type B, MIFARE®</li> <li>• ISO/IEC 7816-3, T=0/T=1</li> <li>• ISO 15693</li> <li>• Serial memory support can be made available on request</li> </ul>
<b>Card Types Supported</b>	<ul style="list-style-type: none"> <li>• ISO/IEC 7816 -1, -2, -3, -4 contact smart cards</li> <li>• ISO/IEC ID-1 Size: 30 mil (±10%) contactless smart cards; ISO/IEC 14443-1, -2, -3, -4, DESFire®</li> </ul>



# DATACARD® MX SERIES MODULES

**MX8100™**  
**MX6100™**  
**MX9100™**

## Barrel Smart Card Personalization Module Gen 2 Supported Systems

Available Systems	MX9100™ System	MX8100™ System	MX6100™ System	MX2100™ System
<b>Rated Speed</b>	Up to 4,000 CPH (Actual throughput depends on the application network environment, encoding time, and number of couplers and heads installed in the module)*	Up to 3,000 CPH (Actual throughput dependent on the application network environment, encoding time, and number of couplers and heads installed in the module)*	Up to 1,800 CPH (Actual throughput dependent on the application network environment, encoding time, and number of couplers and heads installed in the module)*	Not Available See the Smart Card Personalization Module data sheet
<b>Allowed Quantity</b>	Up to 3 modules per system	Up to 3 modules per system	Up to 3 modules per system	
<b>Module Configurations</b>	• Supports 24 contact only, 12 dual interface only, or 12 contact and 12 dual interface heads	Supports 24 contact only, 12 dual interface only, or 12 contact and 12 dual interface heads	Supports 24 contact only, 12 dual interface only, or 12 contact and 12 dual interface heads	
<b>System Considerations</b>	• Systems containing this module may be upgraded by adding additional couplers and heads to an existing module or by adding additional modules in order to improve throughput or accommodate longer programming times	Systems containing this module may be upgraded by adding additional couplers and heads to an existing module or by adding additional modules in order to improve throughput or accommodate longer programming times	Systems containing this module may be upgraded by adding additional couplers and heads to an existing module or by adding additional modules in order to improve throughput or accommodate longer programming times	
<b>Module Dimensions</b>	50.1 in. H x 20.0 in. W x 27.0 in. D (127.3 cm H x 50.8 cm W x 68.6 cm D)	50.1 in. H x 20.0 in. W x 27.0 in. D (127.3 cm H x 50.8 cm W x 68.6 cm D)	50.1 in. H x 20.0 in. W x 27.0 in. D (127.3 cm H x 50.8 cm W x 68.6 cm D)	
<b>Weight</b>	200.0 lbs (90.7 kg) plus 1.75 lbs (0.79 kg) per coupler	200.0 lbs (90.7 kg) plus 1.75 lbs (0.79 kg) per coupler	200.0 lbs (90.7 kg) plus 1.75 lbs (0.79 kg) per coupler	
<b>Current Draw</b>	1.47 Amps at 230V (when configured with 24 heads)	1.47 Amps at 230V (when configured with 24 heads)	1.47 Amps at 230V (when configured with 24 heads)	
<b>Heat Output</b>	Average of 1,097 BTUs per hour (when configured with 24 heads)	Average of 1,097 BTUs per hour (when configured with 24 heads)	Average of 1,097 BTUs per hour (when configured with 24 heads)	

\*For throughput estimate based on specific configuration, contact a Technical Sales Consultant.


**Learn more about the MX Series at [entrust.com](https://entrust.com)**

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