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## mDynamo

### Secure OEM Insert Card Reader Module

The mDynamo gives users the flexibility to add a variety of identification and payment acceptance options in a compact, modular design. The small form-factor makes it easy to integrate into new or existing unattended locations including kiosks, vending, parking, or payment terminals; and is an ideal solution for mobile payment applications involving tablets and phones to accept payments almost anywhere. The card reading module is easy to incorporate into an enclosure and easily retrofits into other MagTek insertion-style reader bezels or phone and tablet enclosures. mDynamo is engineered to save the integration designer money in a single, low-cost, yet highly secure device.

### Simple Integration

Using an updated bezel, the mDynamo can be added to a new design or retrofitted to an existing insertion style magstripe reader. The chip card reader and optional NFC module are certified for EMV L1 and L2. MagTek offers a variety of software developer kits (SDKs) to use with Windows, iOS and Android operating systems.

### Contact Chip Card

mDynamo is an affordable and flexible card reading module. It is designed to read contact chip cards that conform to ISO 7816 standards with a modular design to connect both an optional magstripe reader/SCRA and contactless/NFC module. The board is well designed for a compact footprint while offering easily accessible SPI and UART ports with Molex connectors.

### Security

The mDynamo is built on the MagneSafe™ Security Architecture which uses 3DES encryption and DUKPT key management to protect magstripe, EMV chip (contact), and NFC (contactless) card data. As an additional layer of security for magnetic stripe transactions, MagnePrint authentication and Magensa Services can be used to stop fraud by identifying counterfeit or altered magnetic stripe data in real-time.

### Board Front

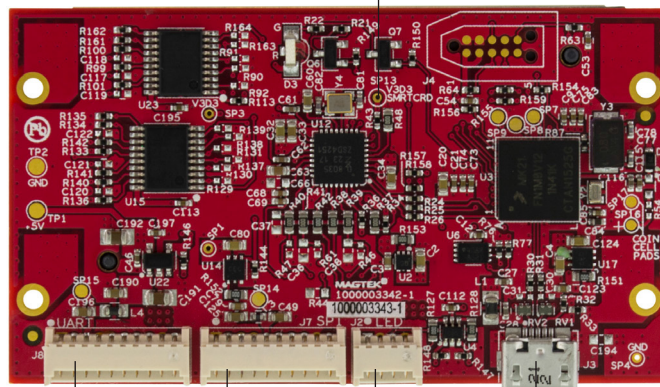
UART Port  
optional contactless/NFC



SPI port  
optional IntelliHead



SmartCard (contact)  
EMV L1 and L2 certified



LED



Micro USB

## Magensa Services

mDynamo is supported by the full suite of Magensa's Services: data decryption, card and device authentication, gateway, device configuration and key injection. MagTek provides well-defined and documented web services and several off-the-shelf applications for reader configuration on Windows, iOS and Android platforms.

## Fast Development

Invest in mDynamo and receive dedicated software, hardware, and payments support. Working with MagTek OEM is the fastest way to secure, compliant and flexible payment solutions for your custom device.

## USB options

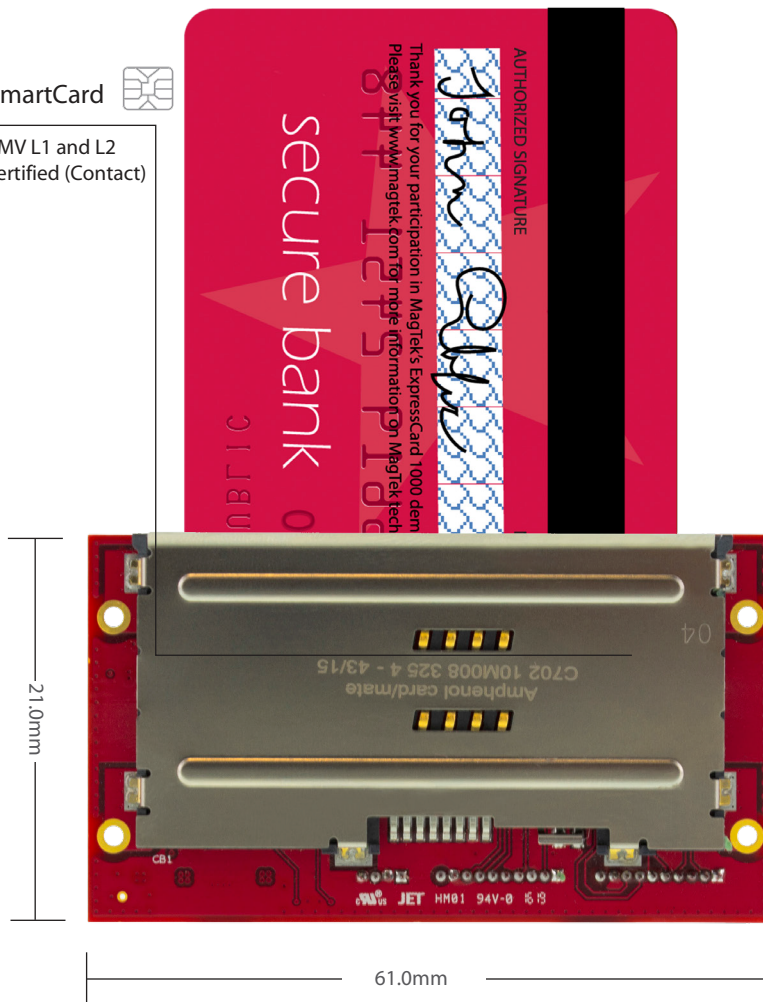
The primary communications interface is USB with secondary interfaces to incorporate optional card reading solutions where desired. The mDynamo is powered over USB so there is no need for additional cabling or external power supplies needed.

## Board Back

SmartCard



EMV L1 and L2  
certified (Contact)



## Specifications

Secure card reader authenticator

Operating System	Windows, iOS and Android
Connection	Communicates to the host through USB
Interface	USB
Ports	1 general purpose SPI port (MSR) 1 general purpose UART port (NFC Module) UART and SPI ports pass through to host
Status Indicator	LED
Card Types	
EMV Contact	ISO 7816 standards EMV L1 and L2 certified
EMV Contactless/ NFC Module (optional)	EMVCo L1, ISO14443 Type A/B PayPass PayWave (EMV mode and MS mode), ExpressPay, D-PAS
MSR/SCRA (optional)	3 track AAMVA, ISO 7811
Solutions	
Security	MagneSafe Security Architecture 3DES, DUKPT, MagnePrint
Web Services	Magensa web services
Reliability	
Magnetic Read Head Life	250,000 swipes
ICC Read Head Life	500,000 card insertions
Warranty	One year
Electrical	
Power Requirements	5 VDC on USB power
ICC Interfaces (compliance)	ISO/IEC 7816-1, 2, 3, & 4
Mechanical	
Board Dimensions	L: 61.0mm x 21.0mm
Environmental	
Temperature	
Operating	32°F to 113°F (0°C to 45°C)
Storage	14°F to 131°F (-10°C to 55°C)
Humidity	
Operating	5% to 90% without condensation at 23°C
Storage	5% to 90% without condensation at 23°C