mDynamo
Insertion Secure Card Reader Module
EMV L1/L2 CERTIFIED MODULE

EMV L1/L2 Certified Contact Reader Module for OEM
INTEGRATION INTERFACES

- UART for EMV and NFC Contactless
- SPI for Magnetic Stripe
- MICRO USB Port
- LED Interface

ACCEPTED PAYMENTS

- EMV Contact Chip

mDynamo is an EMV contact chip module that connects via USB with two optional auxiliary ports (SPI and UART) giving 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.
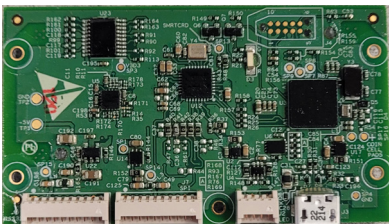
mDynamo Family
mDynamo is integrated into the MagTek DynaDip and mDynamo Outdoor Bezel products and is engineered to save the integration designer money in a single, low-cost, yet highly secure device.

Simple Integration
MagTek offers a variety of software developer kits (SDKs) for easier development. The board is well designed for a compact footprint.

Faster Development
Invest in mDynamo and receive dedicated software, hardware, and payments support. Working with MagTek OEM is the fastest

To get started contact:
retail.solutions@magtek.com

way to secure, compliant and flexible payment solutions for your custom device. MagTek provides development tools for Windows and Android platforms.

Gateway and Services

mDynamo is supported by Magensa Services including data decryption, card and device authentication, gateway and tokenization, device configuration and key injection.

Security

mDynamo is built with the MagneSafe® Security Architecture and uses 3DEA encryption and DUKPT key management to protect transaction data.
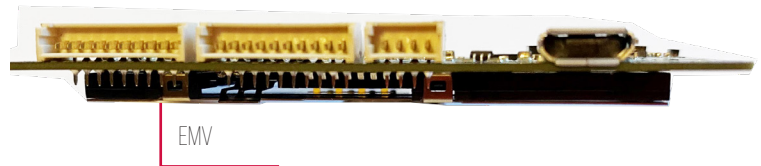
USB options

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

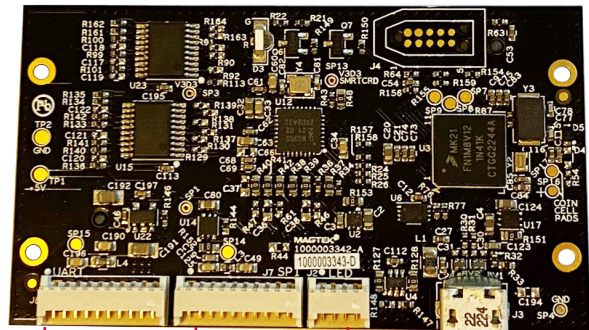## Reference Standards and Certifications

- EMV ICC Specifications for Payment Systems Version 4.3, L1 Contact and L2 Contact
- FCC Title 47 Part 15 Class B
- CE Level B EMC
- CE Safety
- UR/CUR UL Recognized
- MasterCard TQM
- IPC-A-610 Class II Assembly
- EU Directive Waste Electrical and Electronic Equipment (WEEE)
- EU Directive Restriction of Hazardous Substances (RoHS)
- Universal Serial Bus Specs 1.1, 2.0

Specifications

Module	EMV L1/L2 Contact Chip
Interfaces	UART for NFC and EMV Contactless SPI for Magnetic Stripe micro-USB for USB communication and power
Power Requirements	USB powered via Micro-USB B jack 400mA @ 5.0V available on Auxiliary UART port 100mA @ 3.3V available on Auxiliary SPI port
Status Indicator	On-board General Status LED (Red/Green/Amber) Port for External LED (Red/Green/Amber)
Operating Temperature	-4°F to 149°F (-20°C to 65°C)
Humidity	5% to 90% non-condensing
Read Head Life	500,000 insertions
Wired Connection Types	Micro-USB B, compatible with USB 1.1, USB 2.0 Vendor-defined USB Human Interface Device (HID) data format
Mount/Stabilizer	Solution-specific enclosure with card slot, screws, and inserts
Warranty	One year limited warranty
Dimensions	2.60 in. W x 1.47 in. H x 0.30 in. T (66mm x 37.3mm x 7.7mm)
Weight	0.5 oz. (14g)
Web Services	Magensa Gateway, Data Protection, and Remote Services

EMV

UART   SPI   LED   MICRO USB

MAGTEK®
SECURITY FROM THE INSIDE