

#### **Product List**

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# **OEM MagneSafe MSR, EMV & NFC**

EMV Contact and Contactless Modules and Readers

There are more ways to pay and perform digital transactions than ever before. MagTek has the components and peripherals you need for your transaction environment.

MagTek understands that development time is expensive, and that "time to market" is critical. That is why MagTek uses a consultative approach when working with original equipment manufacturer developers and designers. MagTek understands that the products and solutions created are only done through good working relationships coupled with premier hardware, accessible application programming interfaces and software developer kits that make sense. Using a consultative approach, MagTek's OEM team will work with you to develop a solution that best fits your needs.

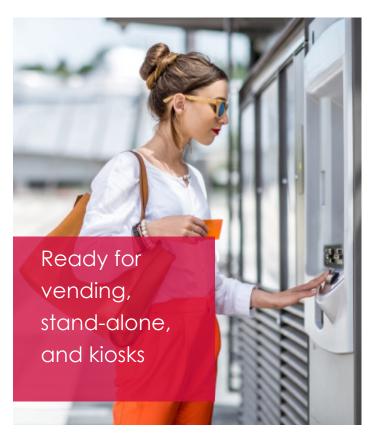
Couple our insertion modules or secure card readers with our near-field communications modules to create an advanced payment solution.

CALL - 562.546.6400 | EMAIL - oem.solutions@magtek.com



#### mDynamo - EMV Module

mDynamo is an EMV 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. 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.





## **DynaDip - MSR & EMV Contact**

DynaDip makes upgrading your magstripe reading solution easier. Using the same basic form-factor and bezels as our P-Series secure card reader authenticator (SCRA), we have added contact EMV chip card reading technology without adding to the overall device footprint or changing its mounting points. Now both card reading devices connect to the host as one logical device over USB. If you want to add contactless card reading, DynaWave can also be connected to offer the most advanced payment acceptance technology in a small form-factor.



# oDynamo - MSR & EMV Contact

oDynamo is a secure insertion card reader that is built to be durable and flexible. oDynamo allows for fast, reliable, and secure reading of magnetic stripe and chip card data from cards that meet the ISO 7810, 7811, and 7816 specifications. The slot and chassis are designed so cardholder-facing elements are impervious to liquid and other harsh environmental elements, making it an ideal solution for gas pumps, ATMs, and vending machines. Ultimate system design flexibility makes it ideal for a variety of unattended payment terminals. oDynamo withstands a wide range of operational conditions and supports multiple communication protocols, and offers a USB connection, an Ethernet connection, and a serial connection.

# Near-Field Communication - Contactless Modules



### DynaProx and DynaProx BCR

DynaProx and DynaProx BCR deliver the next generation in touchless payment acceptance combining the controller and antenna in a small form-factor design. DynaProx readers are best suited for original equipment manufacturers (OEMs), merchants, banks, and other developers looking to build a secure payment, and identification and authentication solution that reads and accepts barcodes, EMV Contactless, and NFC data.

Ideal for kiosks, vending machines, unattended payment terminals, and even countertop deployment with the optional stand, touchless payments and barcode scanning are made fast, reliable, and secure.



DynaWave

Near Field Communication OEM device with higher profile



### DynaWave and DynaWave Slim

There are more ways to pay and perform digital transactions than ever before. MagTek has the components and peripherals you need for your transaction environment. DynaWave and DynaWave slim meet this growing need. Both products deliver the same electronics but housed in different encasements for great integration flexibility. The DynaWave Family, MagTek's NFC modules, allow you to add NFC, near-field communication, contactless transactions to your payment solution. NFC allows for faster payments with a quick tap for transaction processing. Whether you need to accept D-PAS®, PayPass™, payWave®, ExpressPay®, Apple Pay ®, Android Pay® or any other bank mobile application that supports contactless, DynaWave is ready. (Requires Magensa Services or existing L3.)



DynaWave Slim

Near Field Communication OEM device with lower profile



| Payment methods   | mDynamo  | DynaDip   | oDynamo   | DynaProx / DynaProx BCR   | DynaWave / DynaWave Slim   |
|---|--|---|---|---|--|
|   |  | VEO   | PCI PTS 5.x   | PCI PTS POI v6.1  |  |
| Magnetic stripe reader (SCRA) Triple Track (TK1/2/3); Bidirectional read ISO 7810, 7811; AAMVA driver licenses                                      | Optional added module  | YES<br>6 ips to 60 ips  | YES<br>6 ips to 60 ips<br>PCI PTS 5.x Certified Secure Card<br>Reader (SCR) with SRED   | NA<br>NA  | NA NA  |
| EMV chip contact<br>EMVCo L1 and L2 ISO/IEC 7816  | YES  | YES   | YES   | NA NA   | NA   |
| EMV contactless EMVCo L1 and L2, EMV Level 1 / C-2/C-3/C-4/C-5 ISO/IEC 18092, ISO/IEC 14443 (Type A/B)  | Optional added module  | Optional added module   | NA  | Yes<br>EMV Contactless Offline Data<br>Authentication Support (ODA)                               | Yes<br>EMV Contactless Offline Data<br>Authentication Support (ODA)  |
| NFC contactless / mobile wallets ISO/IEC 18092, ISO/IEC 14443   (Type A, Type B) C-1/ C-6/C-7; D-PAS®, PayPass™, payWave®, ExpressPay®, Apple Pay ® | Optional added module  | Optional added module   | NA  | Yes and<br>Enhanced L1 Polling Loop   | Yes  |
| Barcode Reader  | NA   | NA  | NA  | BCR models only   | NA   |
| Reliability and Operation   |  |   |   |   |  |
| MSR / SCRA swipes   | Optional added module  | 1 Million   | 500K  | NA  | NA   |
| EMV insertions  | 500K   | 500K  | 500K  | NA  | NA   |
| Tested Compatible OS(s)   | USB: Windows 7, Windows 8.1,<br>Windows 10   | Windows plug & play<br>Android, Linux, Windows  | Windows and Android   | Windows and Android<br>iOS thru USB iAP2  | Windows 7, Windows 8.1,<br>Windows 10, Android 4.4.2<br>and above on devices with USB<br>On-The-Go (OTG) support   |
| Status/audio indicators   | General Status LED   | Status LED  | General Status LED (Red/Green/<br>Amber   | Status LEDs and audio   | Four LEDs  |
| General   |  |   |   |   |  |
| Connection Method   | USB  | USB or UART for DynaWave  | USB   RS-232 Serial   Ethernet.<br>External USB PCI PED connection  | USB and RS-232,<br>Single connector   | Micro USB-B<br>Micro-USB B, compatible with<br>USB 2.0 and higher; UART  |
| Wireless (Frequency 2.4 MHz)  | NA   | NA  | NA  | NA NA   | NA   |
| Interface   | USB  | USB   | USB   Ethernet/RS-232:<br>TIA232F serial interface<br>specification   | USB / USB iAP2 / RS232  | USB / UART   |
| Ports   | 1 general purpose SPI port<br>(MSR); 1 general purpose UART<br>port (NFC Module); UART and<br>SPI ports pass through to host | NA  | NA  | NA  | NA   |
| Electrical  |  |   |   |   |  |
| Battery   | NA   | NA  | NA  | NA NA   | NA   |
| Power Outputs   | 5 VDC on USB power<br>400mA @ 5.0V avail. on Auxiliary<br>UART port<br>100mA @ 3.3V avail. on Auxiliary<br>SPI port          | USB powered   | 9VDC to 24VDC   | 5V USB Power or Powered<br>separately for RS 232  | USB 5 VDC; Idle: 70mA<br>Active: Up to 350mA   |
| Security and Certifications   |  |   |   |   |  |
| Compliance (FCC, CE, UL)  | YES & ICC Interfaces: ISO/IEC 7816-1, 2, 3, & 4  | FCC, CE, UL   | YES & EMV L1 and L2 contact.<br>PCI PTS 5.x POI 0EM Secure Card<br>Reader (SCR). Supports PCI SRED<br>and P2PE. FCC Title 47 Part 15<br>Class B.                              | FCC, CE, UL, ROHS32-REACH,<br>MC TQM  | YES  |
| Data protection 3DES encryption; DUKPT key<br>management; MagneSafe Security Architecture; Unique,<br>non-changeable device serial number           | YES  | YES   | YES   | YES   | YES  |
| Mechanical  |  |   |   |   |  |
| Dimensions  | Length: 2.60 in(66mm)<br>Width: 1.47 in. (37.3mm)<br>Thickness: 0.30 in. (7.7mm)   | Flat bezel:<br>Length: 3.98 in. (10.1.mm)<br>Width: 2.70 in. (68.5mm)<br>Thickness: 0.31 in. (7.9 mm)<br>Extended bezel:<br>Length: 3.10 in. (78.7 mm)<br>Width: 1.65 in. (41.9mm)<br>Thickness: 1.69 in. (42.8 mm) | Length: 5.52 in. (140.2mm)<br>Width: 3.94 in. (100.1 mm)<br>Height: 2.80 in. (71.1mm)   | 2.09 in. x 2.52 in. x .72 in.<br>(53mm x 64mm x18.5mm   | DynaWave:<br>Length: 2.95 in (74.9mm)<br>Width: 3.6in. (91.3mm)<br>Height: 1.2in. (30.6mm)<br>DynaWave Slim:<br>Length: 2.95 in (74.9mm)<br>Width: 3.6in. (91.3mm)<br>Height: 0.70in. (17.9mm) |
| Weight  | 0.5 oz. (14g)  | Flat bezel: 4.4 oz. (124g)<br>Extended bezel: 3.6 oz. (102g)  | 1.8 lbs (800g)  | DynaProx = 2.0 oz. (56g)<br>DynaProx BCR = 2.0 oz. (58g)  | DynaWave: 2.30 oz (64.0 g)<br>DyanWave Slim: 2.05 oz (58.0 g)  |
| Mount/Stabilizer  | Solution-specific enclosure with card slot, screws, and inserts  | 4 screws and washers with<br>mounting bezel, apply 5.0<br>+/- 0.5 inch lbs of torque when<br>installing the screws  | Solution-specific enclosure using nuts on threaded studs/ screws. Horizontal or vertical card insertion slot orientation. Compatible with EVA EPS 1.1 for UPOS hole patterns. | Hard mounting point to match<br>common ATM Bezel mounts<br>Optional Countertop Stand<br>Available | Solution-specific enclosure using nuts on threaded studs/screws  |
| Environmental   |  |   |   |   |  |
| Operating temp  | -4°F to 149°F<br>(-20°C to 65°C)   | -4°F to 149°F<br>(-20°C to 65°C)  | -22°F to 158°F<br>(-30°C to 70°C)   | DynaProx<br>-30°C to 85°C (-22°F to 185°F)<br>DynaProx BCR<br>-20°C to +55°C (-4°F to 131°F)      | -22°F to 158°F<br>(-30°C to 70°C)  |
| Operating and storage humidity non-condensing   | 5% to 90%  | 5% to 90%   | 10% to 90%  | DynaProx: 90% RH<br>DynaProx BCR: 5-95%   | 10% to 90%   |
| Storage temp  | -4°F to 149°F<br>(-20°C to 65°C)   | -4°F to 149°F<br>(-20°C to 65°C)  | -40°F to 158°F<br>(-40°C to 70°C)   | DynaProx<br>-30°C to 85°C (-22°F to 185°F)<br>DynaProx BCR<br>-40°C to 70°C (-40°F to 158°F)      | -22°F to 158°F<br>(-30°C to 70°C)  |



Founded in 1972, MagTek is a leading manufacturer of electronic systems for the reliable issuance, reading, transmission, and security of cards, barcodes, checks, PINs, and identification documents. Leading with innovation and engineering excellence, MagTek is known for quality and dependability. Our hardware products include secure card reader/authenticators, Qwantum secure cards, token generators; EMV Contact Chip, EMV Contact class, barcode and NFC reading devices; encrypting check scanners, PIN pads, and credential personalization systems. These products all connect to Magensa, a MagTek owned gateway that offers businesses the ability to securely process transactions using authentication, encryption, tokenization, and non-static data. MagTek is headquartered in Seal Beach, CA, please visit www.magtek.com to learn more.