

oDynamo OEM Hybrid Insertion Secure Card Reader Authenticator (SCRA) for Unattended Terminals

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.

Stability and Reliability

oDynamo is made to work in harsh environmental conditions and delivers reliability of 500 thousand magnetic stripe swipes and 500 thousand chip inserts. The device is designed to be integrated into a solution that provides an enclosure, and can be oriented for either horizontal or vertical card insertion. The device has been tested by an FCC lab for Class B radiated susceptibility and has no special shielding requirements.



oDynamo

Insertion secure card reader authenticator able to read magnetic stripe cards and EMV chip cards. EMV L1 and L2 certified.



Call a representative to learn more: 562-546-6400.



Secure Card Reading

oDynamo is secured by the MagneSafe® Security Architecture (MSA), providing immediate encryption of card data using Triple DEA encryption with Derived Unique Key Per Transaction (DUKPT) key management. Additionally, oDynamo provides advanced MagnePrint® Card Authentication, which enables authorizing parties to detect and stop counterfeit card fraud in real-time. The firmware and the encryption keys are securely downloaded to the reader eliminating the chance of tampering.

Engineered Security

The card latch feature allows the card to be securely held within the reader during the entire transaction process, and reduces the possibility of unwanted human intervention during card read operations. Power-fail card latch release and manual override features are available to ensure that a cardholder's card can be easily retrieved under any conditions.

Features

- Cardholder-facing elements impervious to Liquid
- Supports Multiple Protocols
- Card Seated Sensor
- ESD Protection: ±4kV contact discharge / ±8kV air discharge
- EMVCo ESD Protection ±12kV air discharge
- Card Latch
- Anti-Tamper Security Features
- Secure Download and Authentication of Firmware and of Encryption Keys

Talk to an OEM representative



oDynamo PN 21060202



DynaWave

Payment methods	Specifications
Magnetic stripe reader (SCRA)	YES
Triple Track (TK1/2/3); Bidirectional read ISO Type B; AAMVA, other	6 ips to 60 ips PCI PTS 5.x Certified Secure Card Reader
EMV chip contact EMVCo L1 and L2 ISO/IEC 7816	(SCR) with SRED
EMV contactless	NA
EMVCo L1 and L2, EMV Level 1 /C-2/C-3/C-4/C-5 ISO/IEC 18092, ISO/IEC 14443 (Type A/B)	
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®	NA
Reliability and Operation	
MSR / SCRA insertions	500K
EMV insertions	500K
Memory	Non-volatile
Status indicators	General Status LED (Red/Green/Amber)
Device Compatibility	USB, Ethernet, and RS-232
General	
Connection Method	USB RS-232 Serial Ethernet. External USB PCI PED connection
WIFeless (Frequency 2.4 MHz)	NA
Interface	USB Ethernet/RS-232: TIA232F serial interface specification
Status Indicators	General Status LED (Red/Green/Amber)
Optional Accessories	NA
Web services	Magensa Services
Electrical	
Battery	NA
Voltage Requirements	9VDC to 24VDC
Security and Certifications	YES & EMV L1 and L2 contact.
Compliance (FCC, CE, UL)	PCI PTS 5.x POI OEM Secure Card Reader (SCR). Supports PCI SRED and P2PE. FCC Title 47 Part 15 Class B.
Data protection 3DES encryption; DUKPT key management MagneSafe Security Architecture Unique, non-changeable device serial no.	YES
Tamper	Evident & Resistant
Mechanical	
Dimensions LxWx HorLxWx D	3.94 in. W x 2.80 in. H x 5.52 in. L (100.1 mm x 71.1mm x 140.2mm)
Weight	1.8 lbs (800g)
Mount/Stabilizer	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.
Vibration resistance	Resists 5Hz to 50Hz sinusoidal vibrations at 10 m/s² on all axes
ESD protection	ESD Tolerance (EMVCo): ±12kV air
	discharge when device is properly earth grounded ESD Tolerance (FCC/CE): ±4kV contact discharge / ±8kV air discharge when properly grounded
Vapor Resistance	Test Gasoline-96 RON (Reference Gasoline); Reference Fuel C; Diesel 2007 Emission Certification Fuel (Reference Diesel); E10; E25; E85; M15; Road-Use Diesel; Road Use Unleaded
Environmental	
Operating temp	-22°F to 158°F (-30°C to 70°C)
Operating humidity non-condensing	10% to 90%
Storage temp	-40°F to 158°F (-40°C to 70°C)
Storage humidity non-condensing	10% to 90%



Founded in 1972, MagTek is a leading manufacturer of electronic systems for the reliable issuance, reading, transmission and security of cards, checks, PINs and identification documents. Leading with innovation and engineering excellence, MagTek is known for quality and dependability. Its products include secure card reader/authenticators, token generators, EMV contact, contactless and NFC reading devices, encrypting check scanners, PIN pads and distributed credential personalization systems for secure magstripe and EMV enabled cards. These products are used worldwide by financial institutions, retailers, and processors to provide secure and efficient payment and identification transactions. Today, MagTek continues to innovate. Its MagneSafe Security Architecture leverages strong encryption, secure tokenization, dynamic card authentication, and device/host validation enabling users to assess the trustworthiness of credentials and terminals used for online identification, payment processing, and high-value electronic transactions. MagTek is headquartered in Seal Beach, CA.