



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

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 can withstand a wide range of operational and environmental conditions. With support for multiple communication protocols, it is an ideal solution for environments such as gas pumps, ATMs, vending machines, and self-service kiosks.

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.



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



Payment methods	Specifications
Magnetic stripe reader (SCRA) Triple Track (TK1/2/3); Bidirectional read ISO 7810, 7811; AAMVA driver licenses	YES 6 ips to 60 ips
EMV chip contact EMVCo L1 and L2 ISO/IEC 7816	
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)	
NFC contactless / mobile wallets ISO/IEC 18092, ISO/IEC 14443 (Type A, Type B) C-1/ C-6/C-7 D-PAS*, PayPal*, payWave*, ExpressPay*, Apple Pay*	
Reliability and Operation	
MSR / SCRA insertions	500K
EMV insertions	200K
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
Wireless (Frequency 2.4 MHz)	NA
Interface	USB Ethernet/RS-232: TIA232F serial interface specification
Display	NA
Optional Accessories	PCI-PTS 4.x approved keypad, associated display, NFC, and more
Web services	Magensa Services
Electrical	
Battery	NA
Power	Power input: 1A @ 24VDC on RS-232 port Multiple grounding options
Security and Certifications	
Compliance (FCC, CE, UL)	YES & EMV L1 and L2 certified. PCI PTS 5.X OEM certified SCR with SRED
Data protection 3DES encryption; DUKPT key management MagneSafe Security Architecture Unique, non-changeable device serial no.	YES
Tamper	Evident & Resistant
Mechanical	
Dimensions L x W x H or L x W x D	5.52 x 3.94 x 2.80 in. (140.2 x 100.1 x 71.1 mm)
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/s ² on all axes
ESD protection	8 kV
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%

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.

Designed Applications

oDynamo is designed for unattended terminals including gas pumps, ATMs, vending machines, and self-service kiosks. 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. oDynamo does not contain any user-serviceable parts and attempts to disassemble or modify the device are very likely to trigger tamper protection and render the device inoperable. MagTek recommends using shielded cables to provide noise immunity and to prevent radiated emissions. The device itself has been tested by an FCC lab for Class B radiated susceptibility and has no special shielding requirements.

Features

- Cardholder facing elements are impervious to liquid
- Supports multiple protocols
- Card seated sensor
- ESD protection: 8 kV
- Card latch
- Anti-tamper security features
- Secure download, authentication of firmware and encryption keys



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