

# **ACCESS CONTROL**

Introducing Open to Secure (O2S)

**DESFire® EV1/MIFARE Plus®** 

**Readers & Credentials** 



# **Open to Secure Readers & Credentials**





# What Does Credential Security Really Mean?

- Encryption of card data
- Certification of authorship of card data
- Secure storage of access keys "Secure Sectors"
- Secure data communication between reader and card
- Secure data communication between reader and controller





# Relatively Low Sector Reader Sales To Date

- Unsecure CSN readers are still sold in higher volumes than secure sector readers
  - CSN readers are cheaper than sector readers
  - CSN readers function as legacy 125 kHz readers
- Difficult for distributors and system integrators to manage smart card platform installations due to
  - Cumbersome reader setup
  - Complex card programming
  - Lack of knowledge
  - Time consuming, high labor cost
  - High after-sales service



# **O2S – Open, Secure & Simple**

#### OPEN

- Non-proprietary, Open Credential Standards
  - MIFARE® DESFire® EV1
  - MIFARE Plus® X
  - MIFARE Plus<sup>®</sup> S
- Supports SIA Open Supervised Device Protocol (OSDP) –
  Reads any OSDP card format and outputs accordingly

## SECURE

- AES 128-Bit Encrypted Data Communications
- Robust key management

#### SIMPLE

True plug & play solution - no complex configuration required



# The O2S Reader Lineup











# **O2S Credential Lineup**

- Supporting a broad array of credential technologies
  - MIFARE DESFire EV1, MIFARE Plus, MIFARE Classic
- And a wide variety of credential formats
  - Wiegand xx-bit
  - OSDP via RS-485 (selected models)
  - Rosslare Clock & Data







## The Need for O2S

- O2S readers and cards are easy to set up and install, just like a low-frequency reader
- O2S readers and cards are pre-programmed at the factory
  - OPEN TO **SE**C
  - No setup needed for keys on the reader
  - No complex programming of keys and private ID on the credential
- Similar reader cost



- OSDP support option
  - Bi-directional communication paves the way for advanced security applications – Handling of smart cards, public key infrastructure and mobile device access



## **O2S Reader/Credential Benefits**

- Filling the demand for easy-to-manage smartcard solutions that provide much more than just CSN info
- MIFARE Plus and DESFire EV1 cards encrypt the data and provide high-level secure transmission between card and reader
- Rosslare's versatile card format transmits data to the controller using the protocol programmed to the card, i.e. the reader is transparent
- Preconfigured keys provide a highly secured credential w/o having to program reader or cards – You define the key and we manage it for you
- Easy upgrade from non-secure MIFARE CSN to secure MIFARE Plus/DESFire EV1 in the field



# **O2S Reader Model Numbers**

Model	Keypad	Technology
AY-G6270/AY-H6270	No	MIFARE Classic/Plus
AY-G6370/AY-H6370	Yes	MIFARE Classic/Plus
AY-G6280/AY-H6280	No	MIFARE Classic/DESFire EV1
AY-G6380/AY-H6380	Yes	MIFARE Classic/DESFire EV1

G = EU gang-box shape, H = mullion shape



## **O2S Readers – Hardware Features**

- Large RGB LED lens
- SABIC Lexan 241 plastic (black or white)
- Construction meets IP65
- Tactile, blue backlit keypad
- 18" pigtail (terminal block option)
- All-inclusive mounting kit (label, anchors, screws, etc.)
- OSDP option Interfaces with any OSDP controller
- DESFire EV1 readers include onboard NXP AV1 SAM IC:
  - Highest level AES 128-bit encryption
  - Safe storage of file access keys



# **H-Box Prox Only**



Base Model No.	Credential Tech.
AY-H6270	PLUS X/S
AY-H6280	DESFire EV1

Fits U.S., UK, and Asia Switch Box

120.0 x 80.0 x 23.0<sup>1</sup> mm

4.72 x 3.15 x 0.91 in.



# H-Box Prox & Keypad



Base Model No.	Credential Tech.
AY-H6370	PLUS X/S
AY-H6380	DESFire EV1

Fits U.S., UK, and Asia Switch Box

120.0 x 80.0 x 23.0<sup>1</sup> mm

4.72 x 3.15 x 0.91 in.



# **G-Box Prox Only**



Base Model No.	Credential Tech.
AY-G6270	PLUS X/S
AY-G6280	DESFire EV1

### **For Mullion Mount Installations**

145.3 x 42.0 x 23.0<sup>1</sup> mm

5.72 x 1.65 x 0.91 in.



# **G-Box Prox & Keypad**



Base Model No.	Credential Tech.
AY-G6370	PLUS X/S
AY-G6380	DESFire EV1

### **For Mullion Mount Installations**

145.3 x 42.0 x 23.0<sup>1</sup> mm

5.72 x 1.65 x 0.91 in.



# **O2S Solution Benefits Summary**

- Highly-secured smart card solution with minimum effort
- Simple operation
- Easy installation and card enrollment No need for a programmer
- Transmission format flexibility meeting virtually all customer requirements
- Next-generation OSDP support to move beyond Wiegand
- Earn more revenue and profits by selling O2S format cards





# Thank you!

