## SOFTWARE HOUSE

### **Multi-Format Smart Card Readers**



The Software House Multi-Format Smart Card Readers allow customers to combine the power of enhanced security with other critical business applications. The Smart Card Readers are ISO compliant and read serial numbers from the following card technologies: ISO 14443A (including DESFire®, MIFARE® serial number and sectors), ISO 14443B and ISO 15693 (including My-D®, SLI-2, *ICLASS®* serial number, and many more), providing an incredibly versatile access control solution.

The Smart Card Readers are available as a basic fixed model or as a flex model that allows users to update the readers with new functionality or enhancements at any time with flash firmware. The flex readers save significant time and money by allowing users to simply flash new card protocols or formats directly to the reader. Flex versions also support the capability to read MIFARE® sectors.

The Software House Smart Card Readers are available in a wide variety of configurations and deliver a convenient, affordable smart card solution.

#### **KEY FEATURES**

- Configurable Wiegand output
- Reads unique serial number or programmed sector data
- 100% ISO compliant
- Outdoor/indoor use
- Surface mount wiring option available for European package
- · Mount on metal with isolation spacer
- Multiple output formats
- · Plug-in screw terminals
  - o External beeper control
  - o Power and ground
  - o Two-wire Wiegand
  - o External green and red LED control
  - o Two-wire RS485 (available with flex readers only)
- · Available in single gang model
- Tamper switch



# Software House

### PROGRAMMING AND FORMAT INFORMATION

	Smart Card Fixed Reader	Smart Card Flex Reader
Card Technologies Supported		
ISO 14443A serial number	J	J
MIFARE® serial number	J	J
DESFire® serial number	J	J
ISO 14443B serial number	J	J
ISO 15693 serial number	J	$\checkmark$
iCLASS® serial number	J	$\checkmark$
MIFARE® sectors		$\checkmark$
Controller Communications		
Wiegand	J	$\checkmark$
Flashable via RS485		$\checkmark$
Open Standards Compliance		
ISO 14443A	J	J
ISO 14443B	J	$\checkmark$
ISO 15693	J	$\checkmark$
Configurable Using Program Card		
Pass-through <sup>1</sup>	J	$\checkmark$
Fixed length <sup>2</sup> (26-bit, 32-bit, 35-bit, 37-bit, 64-bit)	√	J
MIFARE® sectors Select a sector (0-15) Customize encryption keys Specify data format (number of bits output) Enable On Card PIN functionality		√

### **TECHNICAL SPECIFICATIONS**

Agency Certifications	.FCC Part 15, CE, UL 294 full outdoor (pending)
Minimum Wiring	.4 conductors
Cable Recommendations	.22 AWG, stranded
Color	.Black or light gray (custom colors & patterns available)
Accessories	.European surface mount kit
	Isolation spacer
Dimensions	
Model SWH-1100 and SWH-2100	.111 mm x 84 mm x 28 mm (4.37 in x 3.31 in x 1.10 in), single gang
Environment	.UL listed for interior or exterior
Operating Temperature Range	35° to 67°C (-31° to 151°F)
Humidity Range	. 0 to 100%
Index of Protection	. IP65
Power Supply	. 8 - 16 VDC 125 mA max @ 12 VDC
Read Range	
Model SWH-1100 and SWH-2100	.Up to102 mm (4 in)
Read Time	.Technology dependent (typically < 300 msec)

<sup>1</sup> Pass-through — the default setting for the smart card readers which allows the reader to send all the data on the card.

2 Fixed length — the reader can be configured to output a fixed length by padding or truncating data on the card.

ISV/Software Solutions

