

# SMX 9918

## Compact Proximity Reader

It's weatherized, compact and attractive design making it suitable for all indoors and outdoors application.

The SMX-9918 high-tech internal 16-pin microcontroller converts and process input signals to Manchester code and provides both RS232 and 26 Bit Weigand as its output.

The SMX-9918 has vandal resistant electronics encapsulated in proxy to add more security and reliability to your access control needs. The reader is integrated with buzzer and bicolor LED for System / Reader Status.

The SMX-9918 weatherized design let it works under harsh environment and wide range of operating temperature from -10 to +50 Deg.C and up to 95% of humidity.

The SMX-9918 small size provides flexibility for mounting. It can be installed on walls, door mullions, or single and double gang boxes.



### Features

- RS232 and 26 Bit Weigand outputs
- Internal 16-pin microcontroller
- Indoor / Outdoor
- Up to 10 cm read range
- Reading Speed up to 70ms
- Bicolor LED
- Piezo Buzzer
- Wide temperature and humidity operating Range

# SMX 9918

Low Cost Compact Proximity Reader

## Technical Specifications

SMX-9918	
Typical Read Range	Up to 10cm (4")
Input Voltage	8 to 15VDC
Current DC maximum	85ma
Dimension (H.W.D) mm	113.5 * 45.6 * 17.8
Dimension (H.W.D) in.	4.5 * 1.75 * 0.7
Color	Black
Transmit Frequency	25 KHz
LED Indicator	Bicolor Standard(Red, Green)
Piezo Buffer	Integrated
Operating Temperature	-35 C to 65 C(-30 F to 150 F)
Reader Format	26-bit Weigand and RS-232 ASCII
Maximum Distance from Controller	300m (1000')
Tamper Switch	N/A

## RS232 interface format

Baud rate: 9600 BPS  
Start bit: 0  
Parity: NONE  
Data bit: 8 bits  
Stop bit: 1  
Control : HARDWARE.  
Output: : ASCII

## Ordering Information

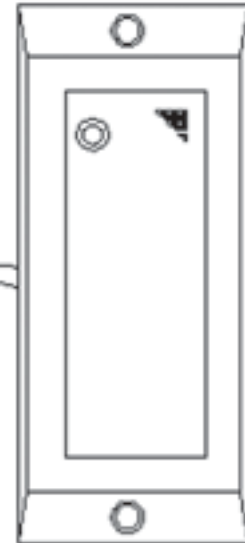
SMX-9918-232	W26 / RS232	Output Format
SMX-9918-485	RS485	Output Format

# SMX-9918

## Installation and Wiring Guide

### SMX-9918-232

Gnd	Black
+12VDC	Red
Hold	Gray
D0	Yellow
D1	Green
LED	White
Beep	Blue
RS232 / TX	Brown



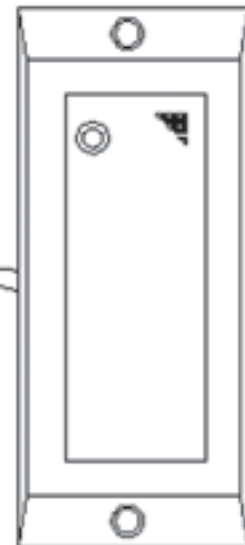
### SMX-9918-485

#### Reader ID Setup

ID#	Dip Switch
0	0000
1	0001
2	0010
3	0011
4	0100
5	0101
6	0110
7	0111
8	1000
9	1001
10	1010
11	1011
12	1100
13	1101
14	1110
15	1111

Switch ON=0  
Switch OFF=1

Gnd	Black
+12VDC	Red
RS485 +	Green
RS485 -	Blue
Output	Brown



#### Data Read Sequence

For reading Card Data from the reader you should do following sequence

- 1- Send data request command to reader `[55 | ID#]`
- 2- Reader sends card data as `[ID#|nn1|AA|nn2|AA|nn3|AA|nn4|AA|nn5|AA|CS]`
- 3- After reading the data should send `[88 | T/ID]` if successfull or `[55 | ID#]` if failed to receive data

\* All the numbers are in Hexadecimal.

\* nn1-nn5: Card data.

\* AA: Hex number of AA between each card data for data receiving control.

\* CS= Checksum by making exclusive or of card data.

\* T/ID: First nibble as ID# and second nibble as Output pulse duration. (for example for ID:1 and 1 sec pulse T/ID= A1 (Hex).