



W2RS485

ETConcept

Data Sheet
(V 1.0)

Wiegand to RS485 Converter

The W2RS485 model is part of the W2X family of bidirectional wiegand converters developed to interconnect security equipments. The W2X family has a autodetection feature allowing the connection to any standard controller or reader without any previous configuration or setup procedure, this feature speeds up the installation process. With the RS485 interface this converter can extend the wiegand interface up to 1200m. The anodized aluminium enclosure makes this units the most robust on the market.

General Characteristics

W2RS485's automatically configuration feature will speed up the installation process and readiness of the overall system.

This converter supports a wide range of Wiegand formats, from 6 to 96 bits long, allowing the connection to any reader or controller on the market.

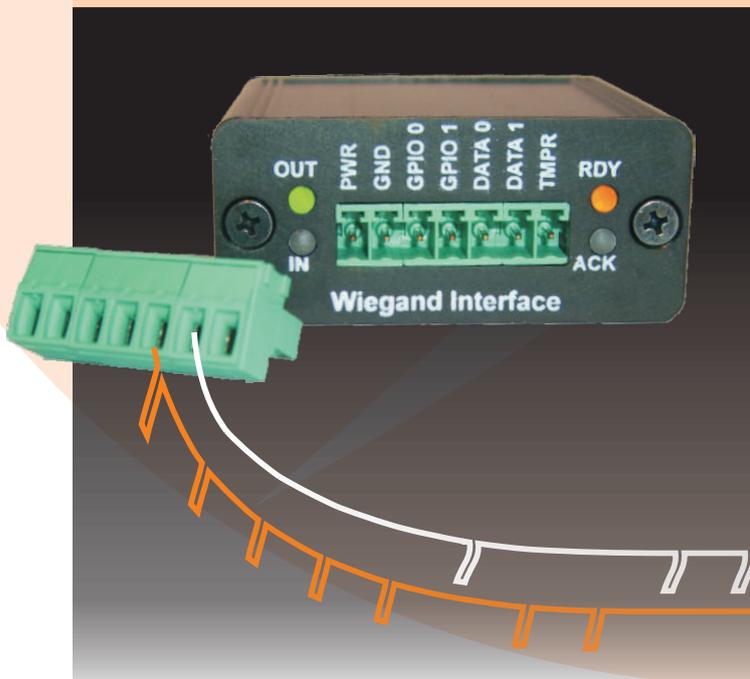
It's possible to control the LED and Beep signals through the W2RS485's general purpose I/O ports (GPIOs)

Tamper port (TMPR) is used to monitor tamper signal from readers or controllers, or it can be reconfigured to a general purpose I/O port.



Main Features

- Bidirectional converter
- Autodetect Wiegand device (Controller/Reader)
- Support Wiegand formats from 6 to 96 bits
- Up to 3 general purpose I/O ports.
- Anodized aluminium enclosure.
- Extend Wiegand up to 1200m



**Product Specifications**

Electrical Characteristics	
Operating Voltage Range	Min. 7V DC Max. 16V DC
Current Consumption	Typ. 30mA
Environmental Characteristics	
Operating Environment	Indoor and Outdoor ¹⁾
Operating Temperature Range ²⁾	0°C to 70°C
Operating Humidity	0 - 95% (non-condensing)
Storage	-40°C - 70°C and 0 - 95% (non-condensing)
Wiegand Interface	
Wiegand Format Length	From 6 bits to 96 bits
Idle Period between Wiegand frames	Min. 30ms
Wiegand Pulse Width	Min. 50µs and Max. 200µs
Wiegand Bit Period	1ms, 2ms
General Purpose I/O	2
Tamper Signal	1 (Can be configured to general purpose I/O port)
Rs485 Interface	
Communication Distance	Up to 1200m
Communication Modes	Full-Duplex without flow control
Baud Rate ³⁾	9600
Mechanical Characteristics	
Weight	75 g
Dimensions	55 mm x 72 mm x 24 mm
Enclosure material	Anodized Aluminium

NOTES:

- 1) The Converter shouldn't be directly exposed to sunlight or rain.
- 2) Can be manufactured for different temperature range.
- 3) Other BaudRates can be supplied.



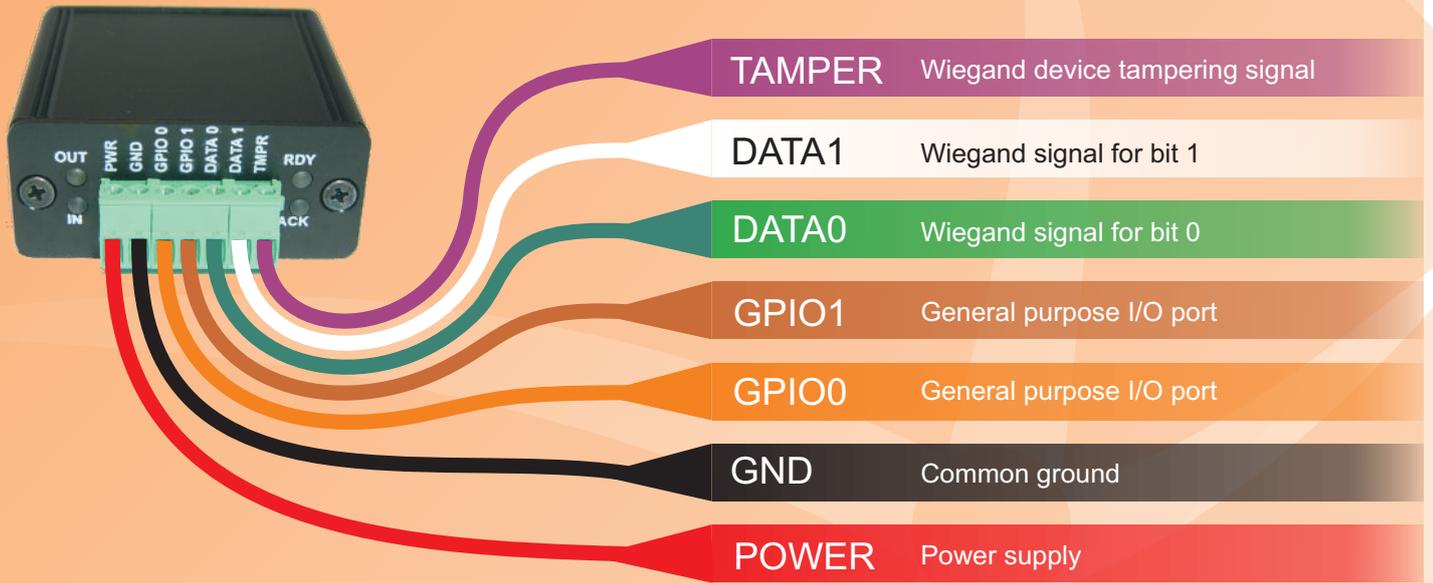
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W2RS485

Conversor Wiegand - RS485



Interface Connections



INPUT mode



From reader

Processing



Converter enter in processing mode when receive:

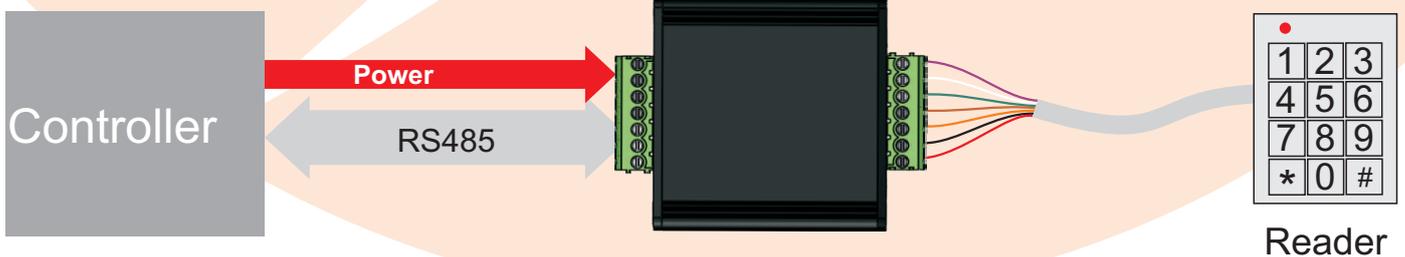
- A Wiegand frame
- A Command from serial interface

OUTPUT mode



To controller

System connections diagram





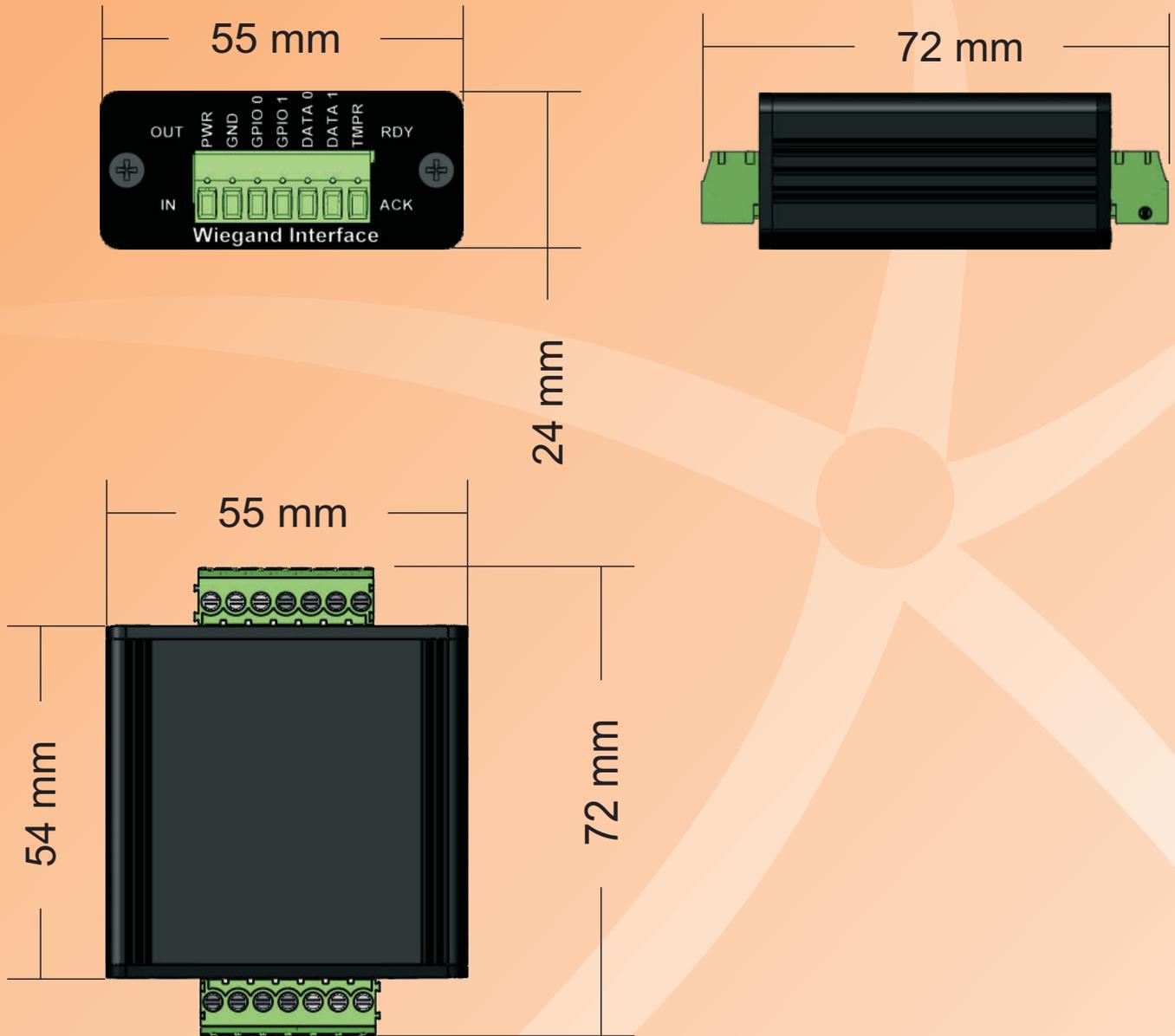
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Conversor Wiegand - RS485



Mechanical Specifications



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