



# Wiegand reader MODULE

- **Control:** manage entrances such as gates, turnstiles and doors
- **Integration:** uses the globally accepted Wiegand protocol
- **Biometrics:** supports a variety of biometrics and long range readers

2 reader ports | 2 relays | 4 digital inputs



## WHO SHOULD USE THE WIEGAND READER MODULE?

Ideal for all premises whether large or small, looking for a high-tech access control solution that is seamlessly scalable.

### PRODUCT BENEFITS:

- Supports a variety of reader types, including biometric devices
- Built-in anti-tamper switch
- End of line sensing for enhanced security
- Plug-and-play simplicity
- Installation can be up to 150m from the controller
- Eight diagnostic LEDs

The Wiegand reader module is a door controller module, which seamlessly operates with the range of Impro controllers.

### Reader types

The reader module supports most readers conforming to the Wiegand standard, such as Seos, multi-discipline, biometric, long range readers, UHF transceivers and more.

### Expandable and flexible

Up to eight reader modules can be connected to one cluster controller, to control 16 doors – we call it clustering – and it means significant cost savings on larger sites, as you only need one controller.

The Wiegand reader module can also be combined with other modules, such as the IO8 module, for unrivalled site flexibility.

### Security

The module comes standard with end of line sensing and tamper protection.

If the unit is tampered with, or cables broken, an alert is automatically sent to the system for further investigation.

In addition, the communication between the controller and reader module is encrypted for added protection.

### Plug-and-play with zero downtime

The reader module brings true plug-and-play simplicity to an installation. To add more modules, simply clip them in. Replacing a unit? Unplug and plug in the new unit. All the wiring and communication is taken care of through the pioneering clip mechanism, and it means zero downtime for your access control system.

### Backward compatibility

The reader module provides backward compatibility to selected older Impro hardware, to enable a simple migration path to new technologies, without the traditional rip-and-replace requirement.

# Specifications

## WIEGAND READER MODULE

Model name	Wiegand reader module	Wiegand reader module IPS	
<b>Product description</b>	Wiegand reader module in plastic housing	Wiegand reader module for IPS box	
<b>Part number</b>	HMW900	HMW901	
<b>Colour</b>	Black	Black	
<b>Dimensions (d-w-h)</b>	18.6cm x 9.9cm x 5.7cm [7.3" x 3.9" x 2.3"]	6.5cm x 15.5cm x 1.2cm [2.5" x 6.1" x 0.47"]	
<b>Approximate product weight</b>	280g [9.9 oz]	274g [9.6oz]	
<b>Material</b>	ABS	ABS	
Electrical specifications			
<b>Input voltage</b>	12 VDC nominal, 15 VDC max, polarity sensitive		
<b>Power requirements at 12 VDC relays off</b>	37 mA current 0.44 W power		
<b>Relay power requirements at 12 VDC</b>	An additional ~0.4 W per relay used		
<b>Power input protection</b>	Reverse polarity and over-current protection transient voltage protection		
Wiegand port specifications			
	Minimum	Typical	Maximum
<b>Pulse width range</b>	21uS	42uS	8mS
<b>Pulse interval minimum</b>	100uS	200uS	8mS
<b>Pulse interval maximum</b>	8mS	9mS	17mS
Input specifications			
<b>Digital inputs</b>	Four		
<b>Input type</b>	2 dry contact inputs with end-of-line (EOL) sensing and 2 dry contact inputs without end-of-line (EOL) sensing		
Output specifications			
<b>Number of relay outputs</b>	Two		
<b>Output type</b>	Relay output: 2x independent, single-pole, double-throw (SPDT) dry contact relays		
<b>Relay contacts</b>	NO • COM • NC		
<b>Contact ratings</b>	10 A at 28 V DC 5 A at 220 V AC 12 A at 120 V AC  100,000 operations minimum		
Environmental specifications			
<b>Operating temperature</b>	-25° to +60° C [-13° to +140° F]		
<b>Storage temperature</b>	-40° to +80° C [-40° to +176° F]		
<b>Operating humidity</b>	0 to 95% relative humidity non-condensing (at +40° C / +104° F)		
<b>Environmental rating</b>	IP20	IP20 in closed IPS box	
Certifications			
<b>CE (EU)</b>	✓		
<b>RoHS</b>	✓		
<b>SABS (RSA)</b>	✓		



**Impro Technologies**  
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in the access control industry

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