

OPTW-100 Quick Start Guide

Complete product manual at CypressIntegration.com



Product overview:

The OPTW-100 is designed to provide isolation between different Wiegand sources. The input side (J1) and output side (J2) are electrically isolated, using optical-couplers to transmit the Wiegand signal from the input side to the output side of the OPTW-100.

What is included:

- ☐ OPTW-100
- ☐ Warranty
- ☐ Quick Start Guide

Product applications:

The OPTW-100 is used primarily in the following applications:

- 1) Connecting two Wiegand readers to one access controller Wiegand port;
- 2) Connecting one Wiegand reader to two different access controllers;
- 3) Connecting Wiegand devices that operate the Wiegand lines at different voltage levels.

The OPTW-100 is necessary when the Wiegand devices in these applications operate the Wiegand data lines at different voltages. The OPTW-100 may also be used in applications where Wiegand devices are not able to be electrically connected, such as issues with power supplies or pull-up resistors.

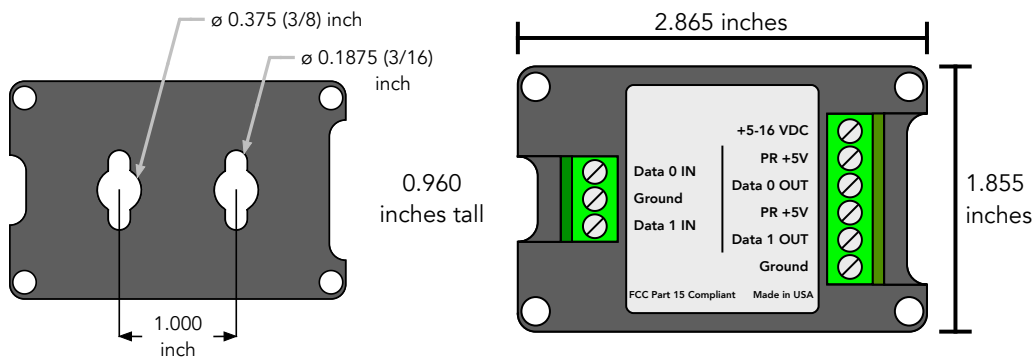
Bench testing:

With existing access control equipment:

Since bench testing is not practical in these applications, follow the appropriate Quick Start Guide wiring diagram, install the OPTW-100 with the existing equipment, and test the system thoroughly.

With new access control equipment:

Bench testing is recommended. Refer to the appropriate Quick Start Guide wiring diagram and set up a bench test accordingly before installing equipment in the field.



J1 Header:

Data 1 IN - Wiegand Data Input 5-24 VDC

Ground - Common Data Ground

Data 0 IN - Wiegand Data Input 5-24 VDC

J2 Header:

+5-16 VDC - Power Input, 12 VDC @ 20mA

PR +5V - Connection to pull-up resistor, 1.5K @ 5VDC

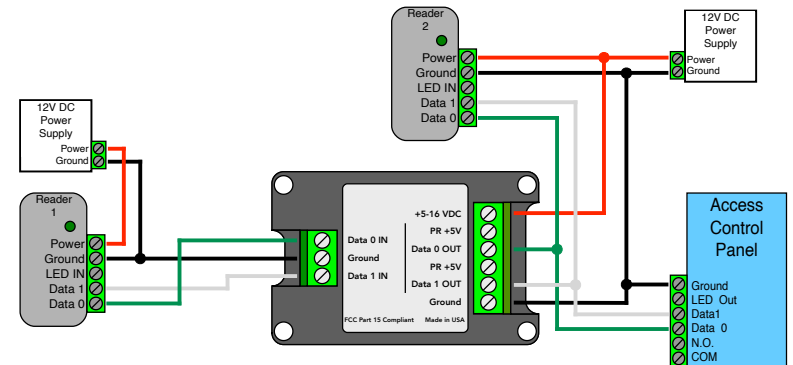
Data 0 OUT - Wiegand Data Output 5 VDC

PR +5V - Connection to pull-up resistor, 1.5K @ 5VDC

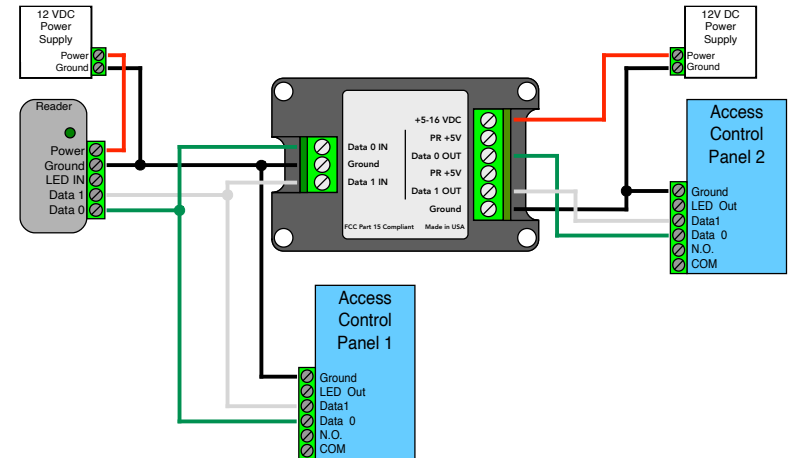
Data 1 OUT - Wiegand Data Output 5 VDC

Ground - Power and Common Data Ground

Wiring Diagram - Two Readers to One Access Controller



Wiring Diagram - One Reader to Two Access Controllers



Wiring Diagram - One Reader to One Access Controller

