



pdk RPW Red Pedestal Controller User Guide

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pdk RPW Red Pedestal Controller



Product Information

The product is a Red Pedestal Controller used for access control systems. The package includes battery leads, diodes, rail bender, antenna, wireless module, nuts, jumpers, and bolts. The controller has various ports like POWER HEART, LINK, ETHERNET, POE OUT, ACTIVITY, POE IN, PORT1 + BUS -, PORT2 + BUS -, BATTERY, DPS, REX, and Locking Relay. It also has OSDP wiring and a Piezo connection.

Product Usage Instructions

1. **Mounting Controller:** Mount the Red Pedestal enclosure securely.

2. **Reader Connection:**

- Wire the main reader to the controller using a 22/5 or 22/6 wire ran to the door controller. Be sure to check polarity and voltage prior to powering the controller.
- Wire the second reader to the controller as shown above. Be sure to check polarity and voltage prior to powering the controller.
- Place jumper(s) to enable OSDP (see OSDP reference guide at the end of this guide for more info).
- The Piezo can be connected to an available relay and configured with software.

3. **Input A / DPS Connection:**

- The DPS is mounted on the door frame in the desired location with a 22/2 wire running from the DPS to the controller. Wire the DPS to the controller as shown above.
- When using two DPS sensors for double doors, wire them in series with only two conductors running back to the controller for connection.
- A rule can be set up to trigger events or outputs based on the AUX Input trigger.

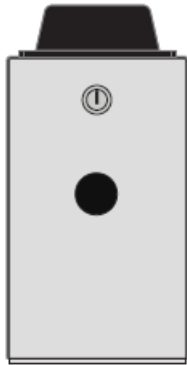
4. **Input B / REX Connection:**

- When installing a Maglock, run an 18/2 wire from the Maglock to the door controller, connecting to the Maglock as shown.

- The REX is mounted in the desired location with an 18/5 wire ran from the REX to the Red gate. Wire the REX to the controller and Maglock, as shown above.
- If reporting is not needed in the system, simply eliminate the green-labeled wire.
- Use the designated jumper(s) to energize the relay output NO and NC to utilize the output as a wet contact.

5. **Locking Relay:** Follow the gate operator wiring instructions to connect the gate operator to an ELK 912B Isolation Relay. Installation of an ELK 912B Isolation relay is recommended.

Package Contents



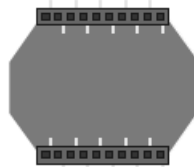
Red Pedestal Controller (1)



Battery Leads (1)



Diodes (2)



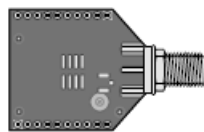
Rail Bender (1)



Jumpers (4)



Antenna (1)



Wireless Module (1)

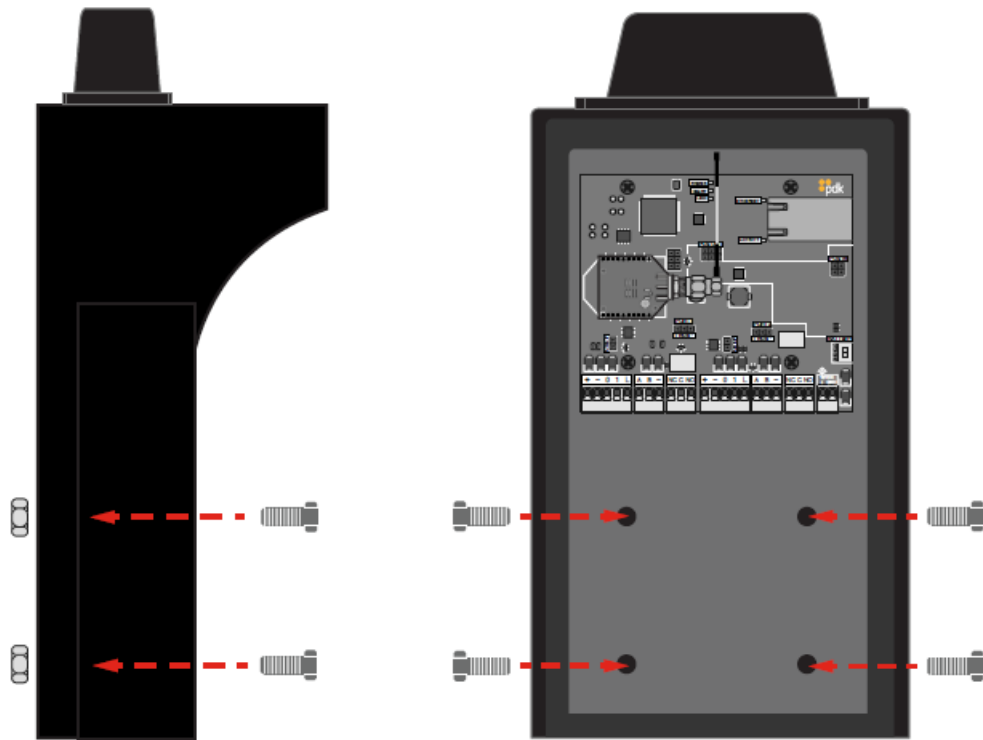


Nuts (4)



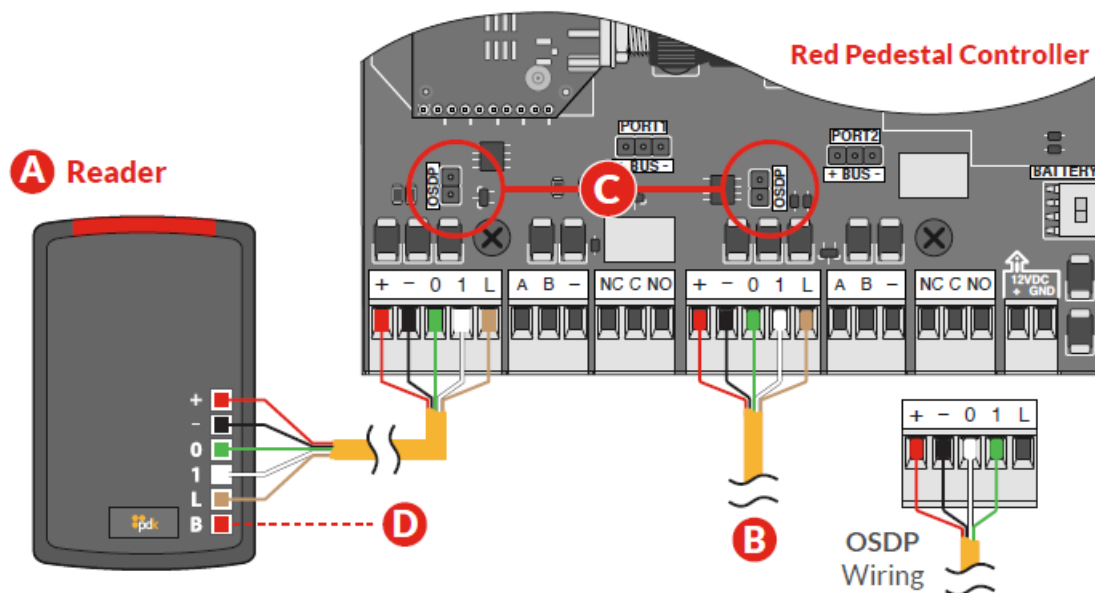
Bolts (4)

Mounting Controller



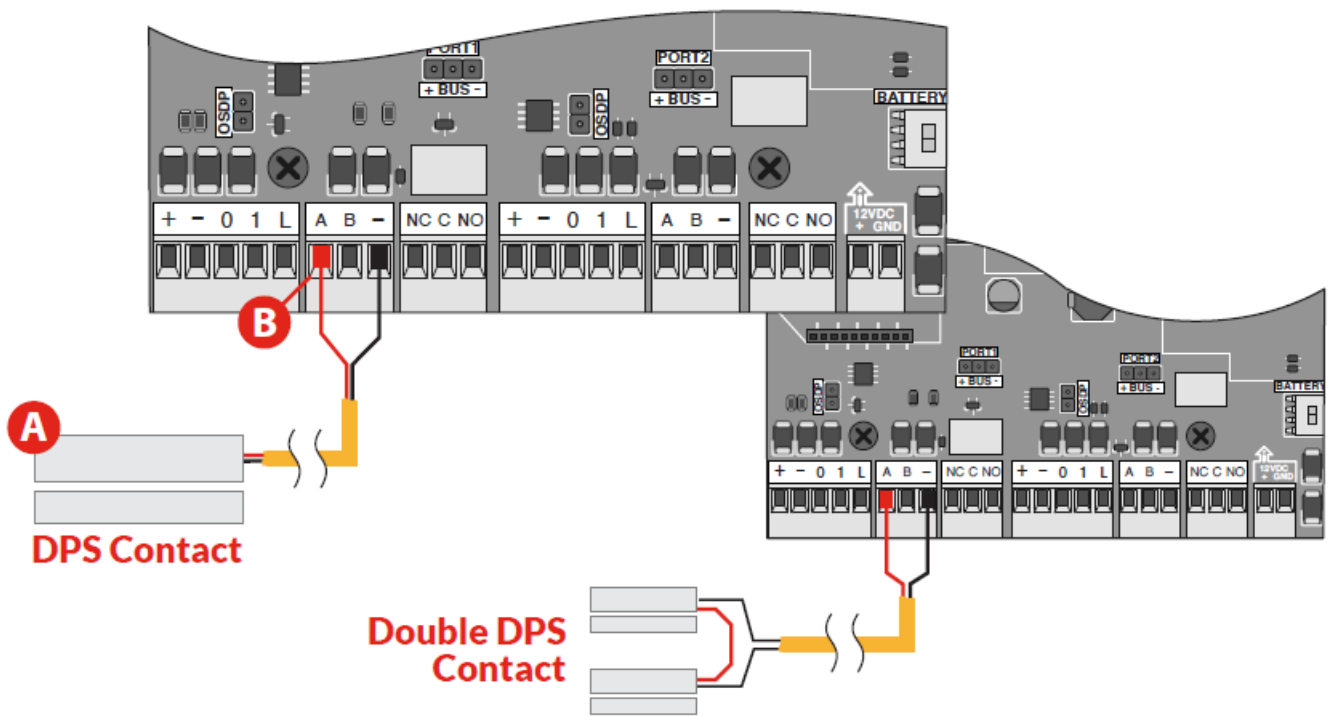
Mount – Mount the Red Pedestal enclosure securely.

Reader Connection



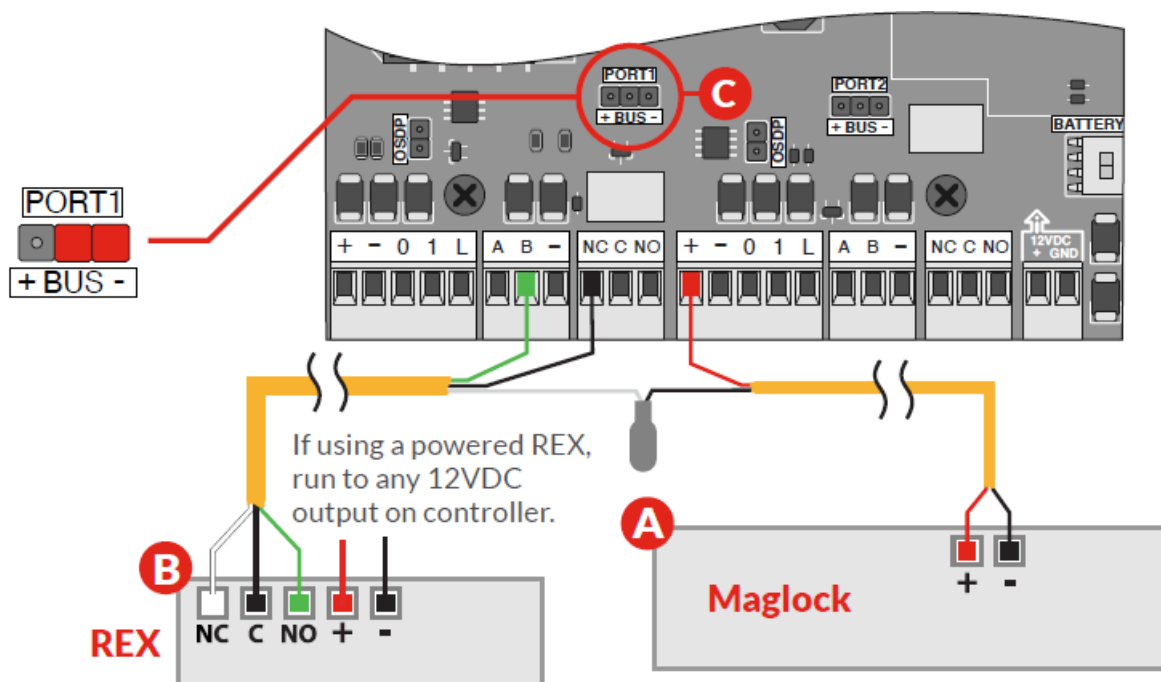
- **A Main Reader** – The main reader is mounted at the door with a 22/5 or 22/6 wire ran to the door controller. Wire the reader to the controller as shown above. Be sure to check polarity and voltage prior to powering the controller.
- **B Secondary Reader** – Wire the second reader to the controller as shown above. Be sure to check polarity and voltage prior to powering the controller.
- **C OSDP** – Place jumper(s) to enable OSDP (see OSDP reference guide at the end of this guide for more info)
- **D Piezo** – Can be connected to available relay and configured with software

Input A/DPS Connection



- **A. DPS (Door Position Switch)** – The DPS is mounted on the door frame in the desired location with a 22/2 wire running from the DPS to the controller. Wire the DPS to the controller as shown above. When using two DPS sensors for double doors, you will wire them in series with only two conductors running back to the controller for connection.
- **B. AUX Input** – A rule can be set up to trigger events or outputs based on this input trigger.

Input B/REX Connection

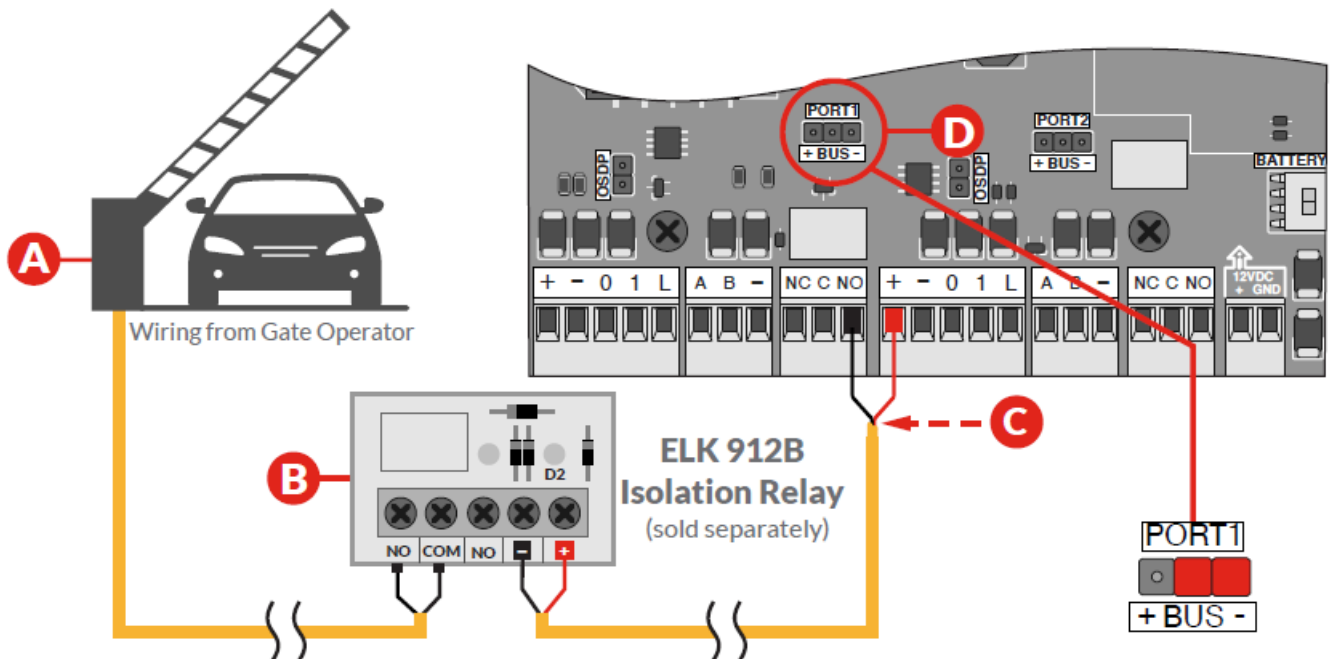


- **A. Maglock** – When installing a Maglock, it is typical to install a REX (Request to Exit) at the door for free egress. Run an 18/2 wire from the Maglock to the door controller, connecting to the Maglock as shown.
- **B. REX (Request to Exit)** – The REX is mounted in the desired location with an 18/5 wire ran from the REX to the Red gate. Wire the REX to the controller and Maglock, as shown above. If reporting is not needed in the

system, simply eliminate the green-labeled wire.

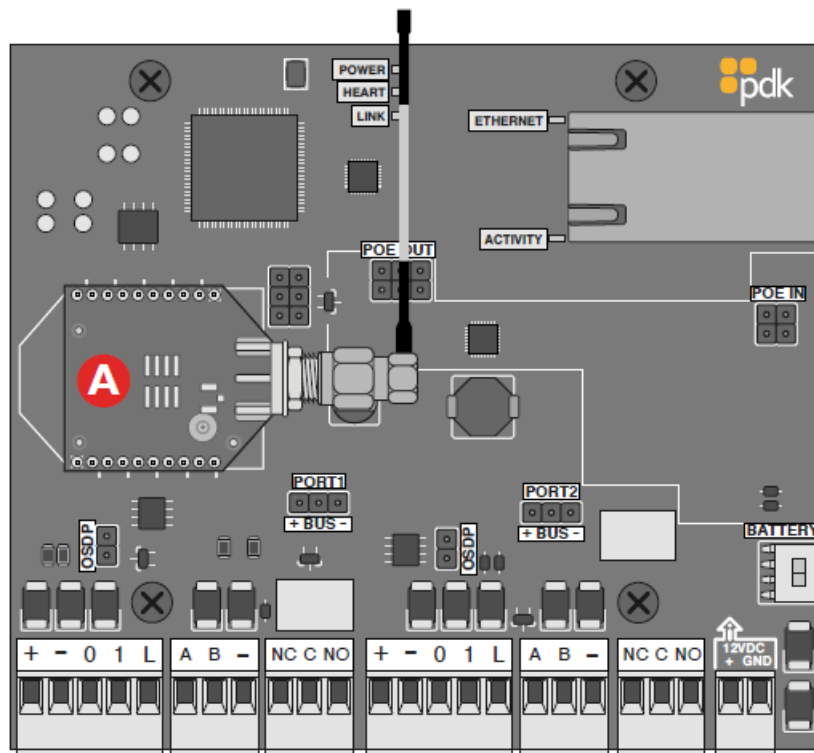
- **C. Jumper** – Use the designated jumper(s) to energize the relay output NO and NC to utilize the output as a wet contact.

Locking Relay



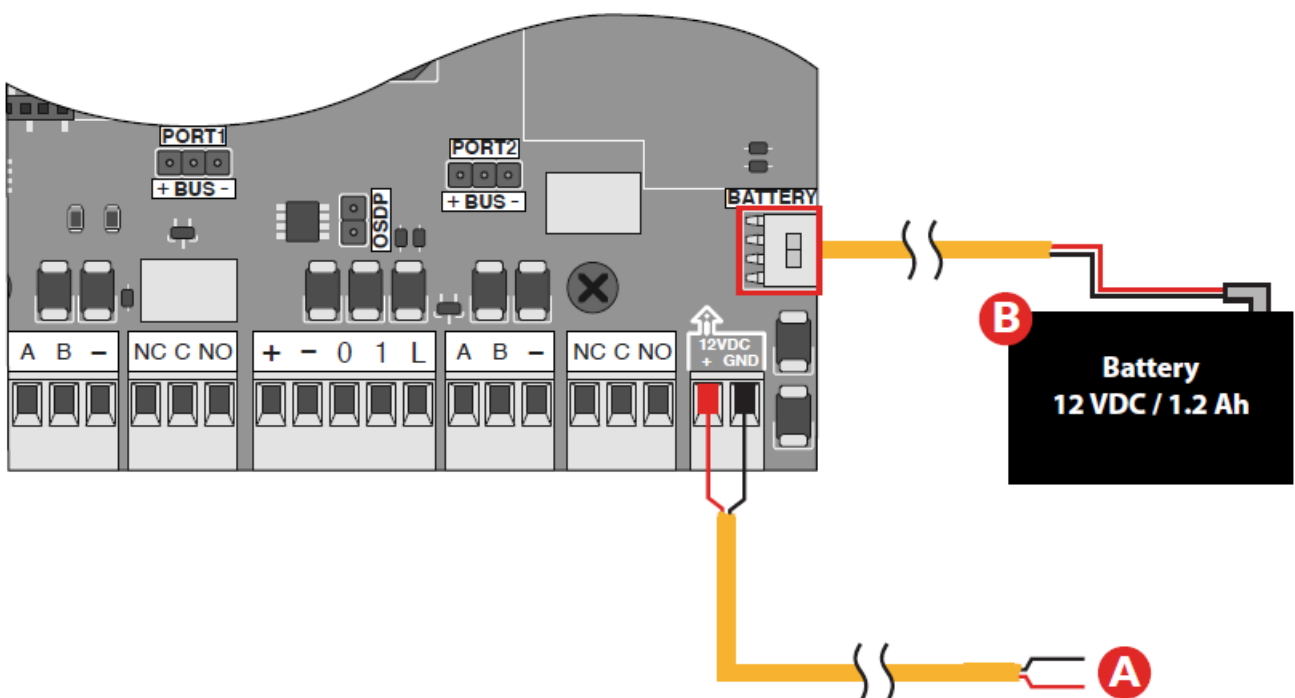
- **A. Gate Operator** – Follow the gate operator wiring instructions to connect the gate operator to an ELK 912B Isolation Relay.
- **B. Isolation Relay** – Installation of an ELK 912B Isolation relay is recommended to prevent electrical damage to the Red Pedestal, Isolation relay is sold separately.
- **C. Locking Relay** – Connect the ELK 912B Isolation relay to the Red Pedestal by connecting the positive wire into a positive port and the negative wire into the NO port on the board.
- **D. Jumper** – Use the designated jumper(s) to energize the relay output to be NO by placing the jumper on the negative (-) and center pins.

Communication Connections



- **A. Wireless** (PN: RPW) wireless module comes prefixed with a WiMAC Antenna.

Power Connection



- **A. DC INPUT** – Use included 14 VDC, 2 Amp transformer for DC power input. It is recommended to use 18/2 wire. For high-voltage applications, use the HV Converter (PN: HVC).
- **B. BATTERY** – The enclosure will fit most 12 VDC 1.2 Ah batteries. The battery is connected with supplied leads and is polarity sensitive.

Reference Guide

- **Fire Input** – To integrate the fire system using a Red Pedestal controller, refer to wiring diagrams at prodatakey.zendesk.com
- **Programming** – After the Red Pedestal controller has been installed, full configuration and system programming will be performed within the pdk io software. Full configuration instructions can be found in the programming manual at prodatakey.zendesk.com
- **Reader Compatibility** – ProdataKey does not require proprietary readers. Door controllers accept a wiegand input, including biometric readers and keypads. OSDP readers are supported by using an included jumper (see OSDP reference guide). Contact support for details.
- **UL 294 Compliance** – All equipment must meet appropriate UL certifications. For UL listed installations, all cable runs must be less than 30 meters (98.5')
- **Part Number** – RPW

OSDP Reference Guide

What is OSDP

Open Supervised Device Protocol (OSDP) is an access control communications standard developed by the Security Industry Association to improve interoperability among access control and security products. OSDP brings heightened security and improved functionality. It is more secure than Wiegand and supports AES-128 encryption.

OSDP Wire Specification

Four (4) conductor twisted pair overall shield is recommended to remain fully TIA-485 compliant at maximum supported baud rates and cable distances.

NOTE

It's possible to reuse existing Wiegand wiring for OSDP; however, using simple stranded cable typical of Wiegand readers generally does not meet the RS485 twisted pair recommendations.

OSDP Multi-Drop

Multi-drop gives you the capability to accommodate many readers by running one length of 4-conductor cable, eliminating the need to run wire for each wire.

- **NOTE** – Four (4) is the maximum number of readers each port can support.
- **NOTE** – Wiegand readers will not work when OSDP jumpers are installed.

PDK Technical Support

Phone: 801.317.8802 option #2

Email: support@prodatakey.com.

PDK Knowledge Base: prodatakey.zendesk.com.

View the user manual here:

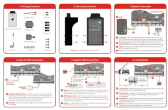
prodatakey.zendesk.com.

PN: RPW

www.prodatakey.com

801.317.8802.

Documents / Resources

	<p>pdk RPW Red Pedestal Controller [pdf] User Guide</p> <p>PDK-RDC-PEDESTAL-WIFI, RPW Red Pedestal Controller, RPW, Red Pedestal Controller, Pedestal Controller, Controller</p>
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References

-  [Cloud-based Access Control | ProdKey | United States](#)