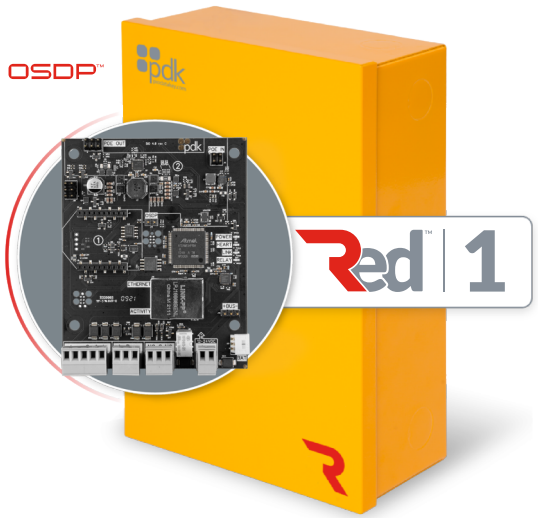
red**1controller** datasheet

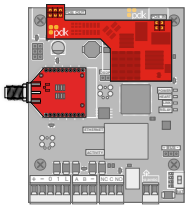
High-Security One Door Controller

PDK's Red™ 1 controller includes built-in Ethernet connectivity and self-discovery, simplifying ip configuration and functionality. Communication plug-and-play connection options are added by purchasing a Red WiMAC™ wireless or PoE++ Module Kit. The Red 1 is equipped with OSDP functionality, an on-board power supply, and a fully-supervised power circuit that monitors input, output, battery voltage, and overall controller health.



Model

PN: R1



Optional Module Add-On Kits

WiMAC Wireless Module | PN: RMW

PoE++ Module | PN: RMPOE

Features

advanced**security**

ProdataKey Red™ products lead the industry in secure communication protocols. This includes OSDP, mobile, and encrypted credential communication.

power**monitoring**

Equipped with an on-board power supply, and a fully-supervised power circuit that monitors input, output, battery voltage, and overall controller health.

plugn'play**connectivity**

All PDK Red devices were designed to be plug n' play. That means they're easy to install right out of the box. It's simple to add any device, no matter how large the job is.

self**discoverable**

The Red 1 will be automatically discovered by the Cloud Node when an Ethernet cable is connected; it is not necessary to enter the IP address; the device is self-discoverable.

module**kits**

Additional WiMAC and PoE++ plug-and-play connection kits can be added by purchasing the respective wireless or PoE kit. Plug the module into the PDK Red 1 board, and it's ready to go.

system**scalability**

Whether you need one door or a thousand, the PDK Red 1 Controller gives you the flexibility to add more doors anytime, anywhere, on any device.

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REV 06032024

Specifications

Connections
Removable Screw-down Terminals
Built-in Power Supply
Industrial-grade 2A Form-C Relay
Reader
Input A
Input B

Communication Options
Ethernet
WiMAC™ Wireless (2.4 GHz/ 802.15.4)
PoE++
Encryption: AES 128bit
Wireless Range: 1 Mile LoS, 450ft indoor average

Environmental
Temperature: -4° ~ +140° F /-20° ~ +60° C
Humidity: 0 - 95% relative humidity non-condensing

Enclosure
Dimensions (W x H x D) 7.625" x 10.4375" x 3"
Metal lockable security can (indoor use only)

Compliance
Conforms to UL 294

Manufacturer's Limited Warranty
One to five-year warranty against defects in materials and workmanship. For full details, visit www.prodatakey.com/warranty

Requirements

Power
12V-24V DC Input
14 VDC 2A 28 watt class 2 wall-wart power supply (Input supply to the board)
Powers readers and other door hardware directly from the bus
Operating Amperage: 35mA (Continuous amperage draw when idle)
Power delivery to the peripheral is shared among all ports. Total output to peripherals is 2AMPs at 12V when powered with the included 2.5 AMP wall adapter.
* Battery not included, but a backup battery must be installed to comply with UL 294.

NOTE: for proper operation, use the provided power supply. When not using the provided power supply, PDK recommends using a regulated power supply that outputs no greater than 24 volts as measured with a multimeter.

Visit www.prodatakey.com or www.prodatakey.com/resources to access marketing, installation, and support resources.
For questions about the Red 1 Controller, please contact support@prodatakey.com.

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