

Neutron Controller

Data Sheet



Key Features

Works exclusively with Keri's Visual Doors™ software

Economical mini-controller for a single door

Networkable via RS-485 for up to 8 controllers

Supports Keri NXT and NXT-E readers

Capable of In/Out access using Keri's a NXT-E reader in conjunction with a standard NXT reader

1000 credential capacity

Equipped with dedicated inputs for REX & Door Sense

Form "C" Relay for door control

Configurable for: Lock Time, Auto Unlock by time

8 Access Groups configurable per credential

CE, FCC, RCM, CE-Red and IC certifications

Neutron Controllers

Keri's Neutron Controller is a small, low cost, single-door controller. Up to 8 Neutron mini-controllers may be attached to a RS-485 network, originating at a PC or Keri appliance, to control 8 doors with the option of using both in/out readers.

Neutron has been designed with low cost and small physical size in mind, yet maintains a powerful feature set, nearly equal to Keri's NXT controllers. In fact, Neutron runs on the Visual Doors version of Keri's Door.NET software and maintains a 1000 credential capacity and a 4,000 event buffer (offline).

The Neutron controller is designed to work with Keri's NXT readers in both 125kHz and 13.56MHz. Traditional 125 kHz Wiegand readers and keypads are not supported. Supplied inputs and relay outputs are fixed to supporting REX (Request to Exit), DPS (Door Position Switch) and door relay.

Note: The minimum supported revision of Doors.NET/Visual Doors is v4.3.5

Neutron Specifications

Neutron	Neutron is a small, low cost, single-door controller
Features	Storage for up to 1,000 cardholders and 4,000 events
	Works exclusively with Keri's Visual Doors™ software
	Networkable via RS-485 for up to 8 controllers
	Requires Doors.NET/VisualDoors v4.3.5 or greater for operation
	Hardware
Controller Voltage	'+12 VDC nominal (9 to 15 VDC)
Current Draw (max)	250 mA
PER NXT Reader	85 mA
Battery (on board)	Lithium, 5-year memory retention, CR2325
Reader Capacity	2 NXT Readers (1 entrance, 1 exit)
Inputs	2 Inputs, 1 - Door Contact, 1 - Request to Exit
Output Relays	1 Output, 1.0 A, 24 VDC maximum, dry circuit, Form C
Host Communication	Ethernet, 10-BaseT/100BaseTX
	Cabling
Controller Power	18 AWG, 2 conductor, stranded, 250 ft. (75 m) maximum run
Earth Ground	18 AWG, 1 conductor, solid, shortest path to earth ground
Inputs and Outputs	22 AWG, 2 conductor, stranded, 500 ft. (150 m) maximum run
Bus to Reader Only - Power	18 AWG, 2 conductor, stranded, 1,000 ft. (300 m) maximum run
Bus to Reader Only - Data	22 AWG, 2 conductor, stranded, shielded, twisted pair, 1,000 ft. (300 m) maximum run
	Operating Environment (with and without lead acid battery)
Temperature	-40° F to 140° F (-40° C to 60° C)
Humidity	0-90%, Non Condensing
	Mechanical Specifications
Dimensions	Board Only - 2.36 in H x 4.0 in W x 0.78 in D (6 cm H x 140.16 cm W x 2.0 cm D)
	Board Enclosure Only - 2.75 in H x 4.25 in W x 1.32 in D (7.0 cm H x 10.8 cm W x 3.35 cm D)
	Full Kit Enclosure - 7.25 in H x 6.6 in W x 1.8 in D (18.4 cm H x 16.76 cm W x 4.57 cm D)
Weight	Board Only - 2.38 oz (67.5 g) board only -- In Board Enclosure - 12.89 oz (365.5 g) -- In Full Kit Enclosure - 18.18 oz (515.5 g)
	Compliance and Product Warranty
Certifications	CE, FCC, RCM, CE-Red and IC certifications
Warranty	One year warranty against defects in material and workmanship

Neutron Specifications

Ordering Information & Related Products	
Model Number	Description
NEUT-3R-APLKIT	Neutron Kit - includes small enclosure over board, plus the larger enclosure, (1) PSC-35 1.8A power supply, (1) i2 Mini-Appliance, (1) Windows® keyboard & mouse, (1) Communication Cable Kit, (1) NXT3R Reader, (3) NXT-C Prox Cards, and (2) NXT-AP Patches
NEUT-5R-APLKIT	Neutron Kit - includes small enclosure over board, plus the larger enclosure, (1) PSC-35 1.8A power supply, (1) i2 Mini-Appliance, (1) Windows® keyboard & mouse, (1) Communication Cable Kit, (1) NXT5R Reader, (3) NXT-C Prox Cards, and (2) NXT-AP Patches
NEUT-3R-KIT	Neutron Kit - includes small enclosure over board, plus the larger enclosure, (1) NXT-3R reader, (1) PSC-35 1.8A power supply, (3) NXT-C & (2) NXT-AP
NEUT-5R-KIT	Neutron Kit - includes small enclosure over board, plus the larger enclosure, (1) NXT-5R reader, (1) PSC-35 1.8A power supply, (3) NXT-C & (2) NXT-AP
NEUT-SOLO	Neutron Controller Board with small enclosure, DIN-Rail mountable
NEUT-EU-KIT	Same as 3-R Full kit (above) w/European power supply
NEUT-CBL-KIT	RS-485 Communication Cable Kit, PC to first Neutron board
Specifications are subject to change without notice	