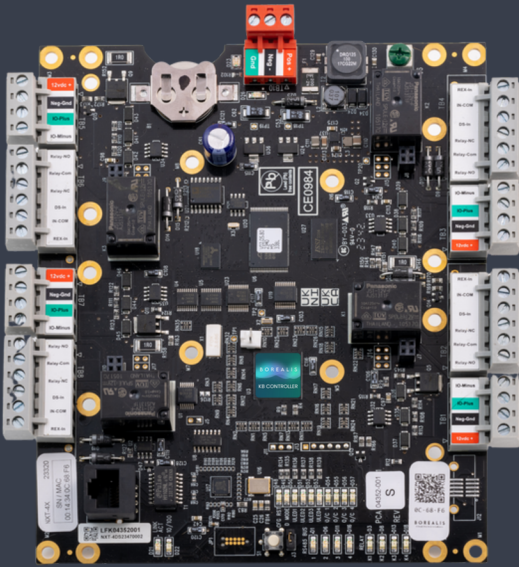


# Borealis KB Controller 4D

## Data Sheet



BOREALIS



### Borealis KB Controller 4D

The Borealis KB Controller is designed to simplify the adoption of cloud-hosted access control. It is a cost-effective solution tailored specifically for Borealis installations.

The Borealis KB Controller 4D is designed to be highly intelligent with minimal reliance on network traffic for decision-making, allowing it to conserve valuable bandwidth. The controller comes with built-in Ethernet functionality.

The Borealis KB Controller offers all the essential features needed for a secure access control solution, all hosted and securely backed up in the cloud.

To enhance the system's capabilities up to four 4x4 Input/Output boards (NXT-4x4) can be added, one to each of the controller's RS-485 trunks (buses).

Customers can choose from Keri's highly secure 4-wire NXT Series proximity readers with reader supervision or use a Reader Interface Module to connect and convert any existing legacy solution with a standard Wiegand output or Keri's MS Series proximity readers. This option will save the need to repurchase credentials and reduce the costs of restructuring your access control solution.

To manage the KB Controllers, Borealis provides a modern, streamlined, and intuitive user interface that can be accessed from any internet browser with no software or SQL requirements.

### Key Features

Borealis Connect App - QR Code Controller Enrollment - Scan and Go, The fast and easy way to the cloud. Manage Doors, cardholder status, and inputs/outputs

4 Door/4 Reader Controller for Keri's Borealis Solution

On-board TCP/IP connectivity – no network adapters required

Utilize existing LAN/WAN/Ethernet or pull your own dedicated CAT-5/6 Network

Embedded MAC address for easy controller importing

Re-assignable Inputs and Outputs

Quick Disconnect Connectors

10,000 Cardholders, 10,000 Event Buffer

Fits in Locking Metal Enclosure



Scan & Go Ready

Note: Controller shown without included enclosure

	<b>Borealis KB Controller 4D Specifications</b>
<b>KB-4D</b>	Supports a typical access control feature set for 4 doors/4 readers
<b>Features</b>	Storage for up to 10,000 cardholders and 10,000 events
	Door Control - up to 4
	Borealis supports 1 access-group per cardholder
	<b>Hardware</b>
<b>Controller Voltage</b>	10 - 14VDC @ 1.65 A (maximum current draw for a fully loaded 4D controller)
<b>Current Draw (maximums)</b>	Per Controller: 650 mA
	Per Bus: 250 mA @ 12 VDC (1)
	Per 4x4: 50 mA static, 200 mA with all four relays energized
	Per NXT Reader: 85 mA
	Per NXT-6RK Reader: 115 mA
	Per RM3/WI-Plus: 50 mA (plus the current of the attached reader)
	(1) A separate power source is required for the peripherals if the cumulative peripheral current draw exceeds the bus max of 250 mA.
<b>Battery</b>	Lithium, 5-year memory retention, CR2032
<b>4 Door/ 4 Reader TCP/IP Controller</b>	Readers: 4 (Keri NXT) or Keri MS and Wiegand <u>when used with a NXT-RM3/NXT-WIPLUS adapter</u>
<b>Inputs</b>	8, reassignable, 4 - Door Contact, 4 - Request to Exit, expandable to 20 Inputs when using 4x4 I/O Expansion Modules
<b>Output Relays</b>	4, reassignable, 1.0 A, 24 VDC maximum, dry circuit, Form C - expandable to 20 Outputs when using 4x4 I/O Expansion Modules
<b>Host Communication</b>	Ethernet, 10-BaseT/100BaseTX
	<b>Cabling</b>
<b>Control Power</b>	18 AWG, 2 conductor, stranded, 250 ft. (75 m) maximum run
<b>Earth Ground</b>	18 AWG, 1 conductor, solid, shortest path to earth ground
<b>Inputs/Outputs</b>	22 AWG, 2 conductor, stranded, 500 ft. (150 m) maximum run
<b>Bus to Reader Only - Power</b>	18 AWG, 2 conductor, stranded, 1,000 ft. (300 m) maximum run
<b>Bus to Reader Only - Data</b>	22 AWG, 2 conductor, stranded, shielded, twisted pair, 1,000 ft. (300 m) maximum run
<b>Bus to Reader/ Peripherals - Power</b>	18 AWG, 2 conductor, stranded, 500 ft. (150 m) maximum run
<b>Bus to Reader/ Peripherals - Data</b>	22 AWG, 2 conductor, stranded, shielded, twisted pair, 500 ft. (150 m) maximum run
<b>Ethernet</b>	CAT-5, minimum

<b>Borealis KB Controller 4D Specifications</b>	
<b>Operating Environment</b>	
<b>Temperature</b>	-40° F to 140° F (-40° C to 60° C)
<b>Humidity</b>	0-90%, Non Condensing
<b>Mechanical Specifications</b>	
<b>Dimensions</b>	In Enclosure - 13.125 in H x 10.625 in W x 3.06 in D (33.34 cm H x 27 cm W x 7.77 cm D)
	Board Only - 6.6 in H x 5.6 in W x 2.55 in D (16.83 cm H x 14.26 cm W x 2.55 cm D)
<b>Weight</b>	Including Enclosure - 5 Lbs (2.27 Kgs) -- Board Only - 8.96 oz (254 g)
<b>Compliance and Product Warranty</b>	
<b>Certifications</b>	CE, FCC, CSA Std. C22.2,
<b>Warranty</b>	Two year, no questions asked, replacement warranty
<b>Ordering Information &amp; Related Products</b>	
<b>Model Number</b>	<b>Description</b>
KB-4D	4 door / 4 reader with enclosure
KB-4D-NE	4 door/ 4 reader without enclosure
KPS-3	Power supply - 12VDC @2.8A, with enclosure, output battery ready
KPS-3NE	Power supply - 12VDC @2.8A, no enclosure, output battery ready
ENC-KE1	Single controller enclosure
KE-8	4 panel enclosure
NXT-4X4	4 input / 4 output auxiliary I/O and local door control module with enclosure
NXT-4X4-NE	4 input / 4 output auxiliary I/O and local door control module without enclosure
NXT-3R	Mullion mount NXT proximity reader for NXT controllers, access/entry version
NXT-5R	Wall mount NXT proximity reader for NXT controllers, access/entry version
NXT-6RK	NXT proximity reader and keypad for NXT controllers
NXT-RM3	Reader interface module - Wiegand and MS reader compatibility
NXT-WI-Plus	Wiegand interface module - Wiegand reader only compatibility
<b>* Specifications are subject to change without notice.</b>	

Note: Keri MS or Wiegand readers require an NXT Reader Interface Module (RM3 or WI Plus)

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