

BlueDiamond Multi-technology Readers $\mathbf{\hat{E}} \in \mathbf{\hat{E}}$



Overview

The BlueDiamond[™] platform offers a complete, next-generation access control experience. With multi-technology readers, a feature-rich mobile app and the ability to support mobile and physical credentials, organizations can upgrade to the BlueDiamond experience at their own pace.

BlueDiamond multi-technology readers are among the most versatile access control readers on the market, work seamlessly with existing infrastructures and leverage open credentialing standards. The readers are non-proprietary, access control platform agnostic and support standard output protocols including Supervised F/2F (SF/2F), Wiegand, OSDP™ and OSDP V2. When utilizing LenelS2 OnGuard®, NetBox™ and Elements™ access control systems, users can conveniently manage mobile credentials through a single system.

Simultaneous support for a wide range of smart cards – including HID® iCLASS®, MIFARE® and DESFire® EV1 and EV2 – in addition to support for standard proximity cards means BlueDiamond multi-tech readers provide a seamless migration path from less secure card technologies to a more secure, open standard with DESFire EV2 and BlueDiamond mobile credentials.

With both mobile-ready and mobile-enabled versions available within the BlueDiamond multi-tech reader portfolio, organizations can achieve enhanced security at their own pace. For organizations that are not ready for mobile credentialing, but want to have the flexibility to add it in the future, the BlueDiamond mobile-ready readers provide flexibility without the need to replace or add hardware. Mobile credentialing can be enabled within these readers through the purchase of a license. The BlueDiamond mobile-enabled readers are ready out of the box to support mobile credentials.

Features & Functionality

- Support for BlueDiamond mobile credentials via Bluetooth
- Multi-tech readers offer simultaneous support for:

• 125kHz proximity cards

- HID Proximity
- AWID® Proximity
- CASI/GE Security ProxLite
- 13.56MHz smart cards
 - MIFARE DESFire EV1/EV2
 - MIFARE Classic ISO 14443
 - Vicinity Card Serial Number ISO 15693
 - HID iCLASS**
- Mobile-ready readers can be upgraded to read mobile credentials through the purchase of a license without the need to add or replace hardware
- Mobile-enabled readers support mobile credentials out of the box
- Wiegand, SF/2F or OSDP with or without secure channel encryption, auto-configuring with LenelS2[™] access panels
- Firmware updates, custom key loading and configuration changes via OSDP file transfer when BlueDiamond multi-tech readers are paired with the OnGuard access control system version 7.5 or greater, Mercury[™] xSeries Controllers and Mercury Series 3 i/o boards
- Slim profile
- Fingerprint-resistant black textured finish
- Optical tamper switch



BlueDiamond Multi-technology Readers

Specifications		•	00000	
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Mobile-ready Readers	Multi-technology Mini-mullion Reader LNL-R10330-05TB S2-R10330-05TB	Multi-technology Standard-size Reader LNL-R10320-05TB S2-R10320-05TB	Multi-technology Standard- size Reader with PINpad LNL-R10325-05TB S2-R10325-05TB	N/A
Mobile-enabled Readers	Multi-technology Mini-mullion Reader LNL-R11330-05TB S2-R11330-05TB	Multi-technology Standard-size Reader LNL-R11320-05TB S2-R11320-05TB	Multi-technology Standard- size Reader with PINpad LNL-R11325-05TB S2-R11325-05TB	Multi-technology Prox + Mobile Mini-mullion Reader LNL-R11030-85TB
Mechanical				
Dimensions	3.8 x 2.1 x 0.8 in 96 x 52 x 21mm	4.2 x 3.0 x 0.8 in 120 x 76 x 21mm		3.8 x 2.1 x 0.8 in 96 x 52 x 21mm
Housing	Molded polycarbonate/ABS			
Finish	Black, textured, fingerprint resistant			
Mounting	Wall surface or standard US, UK, or EU switchbox			Anywhere within 10ft/3M of legacy reader
Environmental				
Operating Temperature	-31° - 149°F (-35° - 65°C)			
Humidity	0 - 100% RHNC			
	0 - 100% RHNC			
Ingress Protection Rating	0 - 100% RHNC IP65			
Ingress Protection Rating				
Ingress Protection Rating Electrical	IP65	35mA	67mA	12mA
Ingress Protection Rating Electrical Voltage Average Current	IP65 10Vdc to 16Vdc	35mA 73mA	67mA 105mA	12mA 21mA
Ingress Protection Rating Electrical Voltage Average Current draw at 12 VDC Peak Current	IP65 10Vdc to 16Vdc 35mA			
Ingress Protection Rating Electrical Voltage Average Current draw at 12 VDC Peak Current draw at 12 VDC	IP65 10Vdc to 16Vdc 35mA 67mA	73mA		
Ingress Protection Rating Electrical Voltage Average Current draw at 12 VDC Peak Current draw at 12 VDC Data Voltage	IP65 10Vdc to 16Vdc 35mA 67mA Rest >4Vdc / Active <1Vdc	73mA		21mA
Ingress Protection Rating Electrical Voltage Average Current draw at 12 VDC Peak Current draw at 12 VDC Data Voltage Reader Interface	IP65 10Vdc to 16Vdc 35mA 67mA Rest >4Vdc / Active <1Vdc Supervised F/2F***, OSDP, W	73mA	105mA 1 RGB LED +	21mA Weigand
Ingress Protection Rating Electrical Voltage Average Current draw at 12 VDC Peak Current draw at 12 VDC Data Voltage Reader Interface Indication	IP65 10Vdc to 16Vdc 35mA 67mA Rest >4Vdc / Active <1Vdc Supervised F/2F***, OSDP, W 1 RGB LED Integral speaker	73mA	105mA 1 RGB LED + illuminated keypad	21mA Weigand
Ingress Protection Rating Electrical Voltage Average Current draw at 12 VDC Peak Current draw at 12 VDC Data Voltage Reader Interface Indication Sounder	IP65 10Vdc to 16Vdc 35mA 67mA Rest >4Vdc / Active <1Vdc Supervised F/2F***, OSDP, W 1 RGB LED Integral speaker	73mA /eigand	105mA 1 RGB LED + illuminated keypad	21mA Weigand
Ingress Protection Rating Electrical Voltage Average Current draw at 12 VDC Peak Current draw at 12 VDC Data Voltage Reader Interface Indication Sounder Read Range	IP65 10Vdc to 16Vdc 35mA 67mA Rest >4Vdc / Active <1Vdc Supervised F/2F***, OSDP, W 1 RGB LED Integral speaker	73mA /eigand	105mA 1 RGB LED + illuminated keypad	21mA Weigand

* The BlueDiamond mobile app is available for iOS $^{\otimes}$ and Android $^{\otimes}$ devices, as well as the Apple Watch $^{\otimes}.$

**Support for HID iCLASS Classic or Standard, not Elite Key, SE or SEOS.

***Support for Supervised F/2F protocol on a BlueDiamond reader is indicated by a label visible on the physical reader.

BlueDiamond Multi-technology Readers

Ordering Information

Mobile-ready Reade	rs		
LNL-R10330-05TB	S2-R10330-05TB	Multi-technology Mini-mullion Reader	
LNL-R10320-05TB	S2-R10320-05TB	Multi-technology Standard-size Reader	
LNL-R10325-05TB	S2-R10325-05TB	Multi-technology Standard-size Reader with PINpad	
Mobile-enabled Rea	ders		
LNL-R11330-05TB S2-R11330-05TB		Multi-technology Mini-mullion Reader	
LNL-R11320-05TB	S2-R11320-05TB	Multi-technology Standard-size Reader	
LNL-R11325-05TB	S2-R11325-05TB	Multi-technology Standard-size Reader with PINpad	
LNL-R11030-85TB		Multi-technology Prox + Mobile Mini-mullion Reader	
Pre-Encoded Creden	tials		
LNL-EV22KPP	S2-EV22KPP	DESFire EV2 ISO PVC 2K 13.56MHz	
LNL-EV22KPPFOB	S2-EV22KPPFOB	DESFire EV2 2K 13.56MHz Keyfob	
LNL-EV22KPPMG		DESFire EV2 ISO PVC 2K 13.56MHz with Magnetic Stripe (no encoding on stripe)	
LNL-EV28KPP	S2-EV28KPP	DESFire EV2 ISO Composite 8K 13.56MHz	
LNL-EV28KPXPP	S2-EV28KPXPP	DESFire EV2 ISO Composite 8K with Proximity Chip	
LNL-EV28KPPMG		DESFire EV2 ISO PVC 8K 13.56MHz with Magnetic Stripe (no encoding on stripe)	
Non-Encoded Crede	ntials		
LNL-EV22KNP		DESFire EV2 ISO PVC 2K 13.56MHz	
LNL-EV22KNPFOB		DESFire EV2 2K 13.56MHz Keyfob	
LNL-EV22KNPMG		DESFire EV2 ISO PVC 2K 13.56MHz with Magnetic Stripe (no encoding on stripe)	
LNL-EV28KNP		DESFire EV2 ISO Composite 8K 13.56MHz	
LNL-EV28KPXNP		DESFire EV2 ISO Composite 8K with Proximity Chip	
LNL-EV28KNPMG		DESFire EV2 ISO PVC 8K 13.56MHz with Magnetic Stripe (no encoding on stripe)	
Licenses			
BDM-CRD-1		Required to create a BlueDiamond owner account	
BDM-MERL		BlueDiamond mobile license upgrade to convert any mobile-ready reader to a mobile-enabled reader	
BDM-SASRDR		Annual license for BlueDiamond mobile-enabled readers. One license is required for each commissioned BlueDiamond reader, allowing unlimited credentials to be issued.	
BDM-SASCRD		Annual license for BlueDiamond mobile credentials. One license is required for each user of BlueDiamond mobile credentials.	
BDM-CONTACTSM [‡]		BlueDiamond annual license for the Contact Notification service. This license will enable this service for OnGuard ES and NetBox customers.	
BDM-CONTACTMD [‡]		BlueDiamond annual license for the Contact Notification service. This license will enable this service for OnGuard ADV and NetBox Extreme customers.	
BDM-CONTACTLG [‡]		BlueDiamond annual license for the Contact Notification service. This license will enable this service for OnGuard PRO and NetBox Enterprise customers.	
BDM-CONTACTENT [‡]		BlueDiamond annual license for the Contact Notification service. This license will enable this service for OnGuard Enterprise customers.	
BDM-INDOORLOC [‡]		BlueDiamond annual license for the Indoor Location service. This license will enable this service for OnGuard and NetBox customers. Facility mapping and location-enabled hardware are also required to use the Indoor Location service.	

⁺Available to customers in the United States and Canada only.



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