

# BlueDiamond Multi-technology Readers



## 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® and NetBox™ 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

				
<b>Mobile-ready Readers</b>	Multi-technology Mini-mullion Reader <b>LNL-R10330-05TB</b> <b>S2-R10330-05TB</b>	Multi-technology Standard-size Reader <b>LNL-R10320-05TB</b> <b>S2-R10320-05TB</b>	Multi-technology Standard-size Reader with PINpad <b>LNL-R10325-05TB</b> <b>S2-R10325-05TB</b>	N/A
<b>Mobile-enabled Readers</b>	Multi-technology Mini-mullion Reader <b>LNL-R11330-05TB</b> <b>S2-R11330-05TB</b>	Multi-technology Standard-size Reader <b>LNL-R11320-05TB</b> <b>S2-R11320-05TB</b>	Multi-technology Standard-size Reader with PINpad <b>LNL-R11325-05TB</b> <b>S2-R11325-05TB</b>	Multi-technology Prox + Mobile Mini-mullion Reader <b>LNL-R11030-85TB</b>
<b>Mechanical</b>				
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
<b>Environmental</b>				
Operating Temperature	-31° - 149°F (-35° - 65°C)			
Humidity	0 - 100% RHNC			
Ingress Protection Rating	IP65			
<b>Electrical</b>				
Voltage	10Vdc to 16Vdc			
Average Current draw at 12 VDC	35mA	35mA	67mA	12mA
Peak Current draw at 12 VDC	67mA	73mA	105mA	21mA
Data Voltage	Rest >4Vdc / Active <1Vdc			
Reader Interface	Supervised F/2F***, OSDP, Weigand			Weigand
Indication	1 RGB LED		1 RGB LED + illuminated keypad	1 RGB LED
Sounder	Integral speaker			
Read Range	Up to 4 in. (10cm) for RFID cards, up to 30 ft. (9m) for Bluetooth			
<b>Warranty</b>				
Warranty	5-year limited warranty			
<b>Certifications</b>				
FCC Part 15   UL294   CE Marked   RoHS   WEEE				

\* The BlueDiamond mobile app is available for iOS® and Android® devices, as well as the Apple Watch®.

\*\*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 Readers		
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 Readers		
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 Credentials		
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 Credentials		
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



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