Proxess
BoxIQ

PoE+, WiFi, BLE Controller

For ProxessIQ™ Software Only

Network

PoE   WiFi

BLE (with Optional BX-ANT1 Antenna

BoxIQ™ is the Proxess solution for the more conventional access control doors using a reader. BoxIQ™ wirelessly communicates with your Proxess electronic locksets "On-Demand". BoxIQ™ also allows the user to control commands and further monitor access to high-security portals using the ProxessIQ™ software.

For communication reliability and optimal battery performance, Proxess locksets may be connected to BoxIQ™ via Bluetooth Low Energy (BLE). Proxess locksets are assigned in the ProxessIQ™ software to a specific BoxIQ™.

Proxess locksets may typically be located at distances of up to a 70-foot radius from the bridge (maximum of 100 feet) with potential reductions due to interference by walls, ceilings, floors and an abundance of other metal surfaces or equipment.
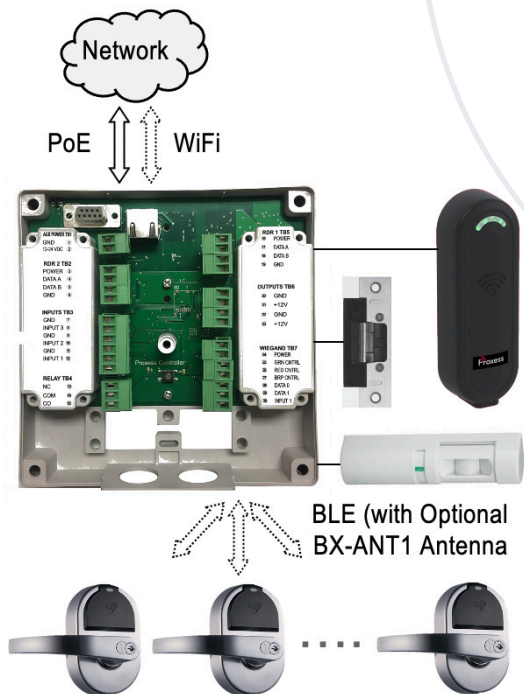
Our Network-on-Card credentials download transactions and upload rights for the offline Proxess locksets which reduces the installation of traditional, expensive, hardwired doors.

An unlimited number of BoxIQ™ controllers may be added to any site or ProxessIQ™ system.

Controllers are simply and quickly added to the system, plugging directly into the facility's existing PoE or PoE+ infrastructure and defined in the ProxessIQ™ software via static or DHCP addressing. On-demand wake-ups for Lockdowns and Door-Open commands, as well as events from Locksets to the ProxessIQ™ software.

For those difficult to reach areas (e.g. gates, out-buildings), the BoxIQ™ controller also includes a WiFi communications backhaul where it would draw low voltage power from near the panel.

Providing security flexibility with the separately ordered BX-ANT1 antenna, BoxIQ™ provides on-demand lockdown and open-door commands and also receives emergency Proxess lockset events.

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FEATURES

	Brings your Proxess locksets "On-Demand" via Bluetooth (*Optional BX-ANT1 antenna required)
	Connect a PoE\PoE+ network cable or power with a transformer and use your existing WiFi
	Allows centralized Lockdown and Open Door commands to Proxess locksets (with BX-ANT1)
	Highest level security credentials using Mifare DESFire EV2™ and BLE
	Credentials collect transactions from Proxess locksets. Security handshakes for verification.
	CONNECTIVITY - Built-in PoE\PoE+ and WiFi communication backbone leverages existing and common infrastructure and reduces installation costs. Add, move and configure doors in minutes, even from remote locations.
	ON-DEMAND - On-demand Lockdowns and Open Door commands (with BX-ANT1) to always-awake Proxess Locksets...also events and notifications from Proxess locksets to the Proxess software.
	NETWORK-ON-CARD - Our credentials go beyond just passing a number to the reader. They know where they belong and perform a handshake with the readers for ultimate security.
	EXPANSION - Unlimited BoxIQ™ controllers, doors and sites in a ProxessIQ™ system. Unlimited users and credentials.
	ENCRYPTION - Upstream and downstream communications utilize AES 128-bit encryption.

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Proxess Bridge™

Online BLE Bridge

For ProxessIQ™ Software Only

The Proxess Bridge™ communication module brings your Proxess compatible electronic locksets online, upgrading the communication frequency and reducing manpower at the door to affect changes.
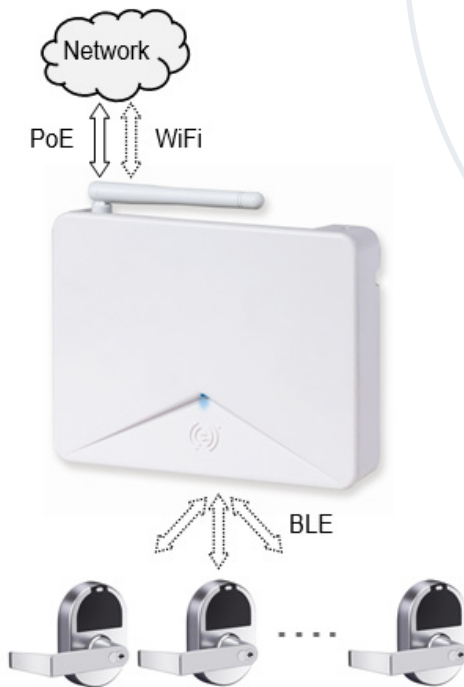
For communication reliability and optimal battery performance, up to eight (8) Proxess locksets may typically be connected to a Proxess Bridge™. Uniquely, locksets are assigned in the ProxessIQ™ software to a specific Proxess Bridge™.

Proxess Locksets may be located at distances up to a 90-foot radius although a typical recommendation is 50 feet from the gateway due to potential interference reductions by walls, ceilings, floors and other metal surfaces or equipment. Proxess locksets are always awake, allowing On-Demand Lockdown, open door and other commands. Our BLE communications technology and frequency hopping maximize lockset battery life, typically exceeding two (2) years.

An unlimited number of Proxess Bridges™ may be added to any site or ProxessIQ™ system. Gateways are simply and quickly added to the system, plugging directly into the facility's existing PoE or PoE+ infrastructure and defined in the ProxessIQ™ software via DHCP.

For those difficult to reach areas, the Proxess Bridge™ also includes a WiFi communications backhaul, where it would alternatively draw low voltage power from near the panel.

Providing security flexibility, Proxess Bridge™ provides on-demand lockdown and open-door commands and also receives emergency lockset events.

FEATURES

	Brings your Proxess locksets On-Demand via BLE (Bluetooth Low Energy)
	Just plug-in a PoE\PoE+ cable...or power with a transformer and use your existing WiFi
	Allows centralized Lockdown commands to locksets
	Gateway for Open Door commands to locksets
	CONNECTIVITY - Built-in PoE\PoE+ and WiFi communication backbone leverages existing and common infrastructure and reduces installation costs. Add, move and configure doors in minutes, even from remote locations.
	ON-DEMAND - On-demand wake-ups for Lockdowns and Door-Open commands, as well as events from Locksets to the ProxessIQ™ software.
	EFFICIENCY - Bluetooth Low Energy (BLE), with frequency hopping, ensures immediately available communication channels to locksets and maximum battery life. Each lockset is bound to specific Proxess Bridge™ gateways for stability and battery preservation.
	ENCRYPTION - Upstream and downstream communications utilize 128-Bit AES encryption.
	BATTERY LIFE - Our unique Always-Available BLE and our advanced battery life routines and technologies extend lockset battery life.

Proxess

HOW TO ORDER:

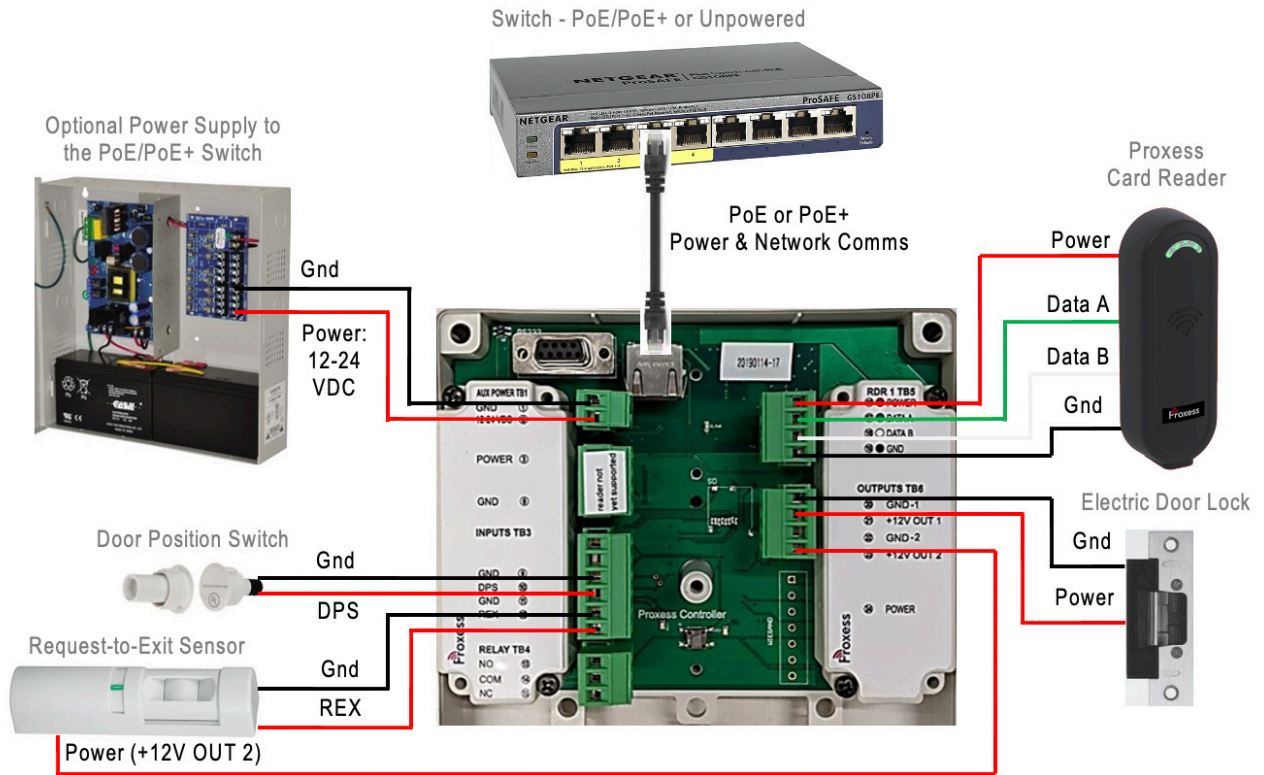|	
Part Numbers:	BX-EN-POE Board with enclosure BX-ANT1 Antenna for On-Demand lockset comms BX-BR1 Proxess Bridge™
Compatibility:	Proxess RoxIQ™ bi-directional, read-write readers, via RS-485; Proxess electronic locksets, via Bluetooth Low Energy (BLE). For use within ProxessIQ™ software.
Simple Anti-Passback:	Simplified anti-passback alternative. One checkbox forces cardholders to use a chokepoint reader for their credential reauthorization, programmable from one day to many years.
Gateway Antenna:	Optional BX-ANT1 BLE antenna to provide "on-demand" communications to up to eight (8) Proxess locksets.
Electrical:	PoE\PoE+ Voltage Input: 36-57 VDC at Line Voltage Input: .83A Current Consumption: 12-18 VDC, 200 mA Door Contact Switch Request to Exit (REX) Out 1 Voltage: 12 VDC Out 2 Voltage: 12 VDC Out 1 Current: 1A Out 2 Current: 1A Out 3 1 Amp (24 VDC) Dry Contact
Communications:	Communications: TCP/IP: Yes WiFi Backhaul (8.02.11): 100Mbps Bluetooth Low Energy (BLE): Yes RS-485: Yes Bandwidth: 230Kbps DHCP Support: Yes, Default Static IP Support: Yes
System Specifications:	Cardholders: 5000 Controllers per System: Unlimited Time Schedules: Unlimited Access Profiles: Unlimited Data Retention: 30 days, Flash Storage Reader Communication: RS-485, Bi-directional Door Hold Open Time: 0-255 seconds Operating System: Linux, SOM On-board
Features:	Reader Ports: 1 x RS-485 Input for Request-to-Exit: 1 Input for Door Contact: 1 Alarm Output: 1 Enclosure Tamper Input: Yes Enclosure Knock-Outs: Yes, 2 x 1 inch
Environment:	Operating Temperature: -20°C - +55°C, -20°F - +132°F Moisture Resistance: No-Provide Suitable Enclosure to Environment
Hardware:	Network Cable Type: CAT-5/6, 2C, 22AWG, OS Reader Cable Type: CAT5e/CAT6 REX Cable Type: 4C, 22AWG, OS Door Contact Cable Type: 2C, 22AWG, OS Lock Release Cable Type: 2C, 18AWG RS-485 Cable Output Type: 4C, 22AWG, OS

MEASUREMENTS

6" \ 152mm
4.75" 120mm
6.5" 165mm
1" / 25mm
6.5" \ 165mm
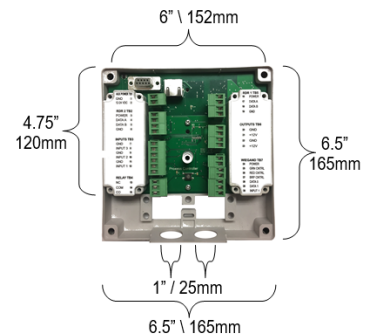
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CONTROLLER, BRIDGE SYSTEM WIRING

Switch - PoE/PoE+ or Unpowered

Optional Power Supply to the PoE/PoE+ Switch

PoE or PoE+
Power & Network Comms

Proxess
Card Reader

Gnd

Power:
12-24
VDC

Power

Data A

Data B

Gnd

Door Position Switch

Gnd

DPS

Electric Door Lock

Gnd

Power

Request-to-Exit Sensor

Gnd

REX

Power (+12V OUT 2)

POWER NOTE: Verify the voltage and current requirements of your selected electric door lock prior to connecting to the Proxess BoxIQ. If you have any questions on the suitability of a direct power connection from the BoxIQ, please select and use a separate power supply and connect per the above drawing.

OPTION

Separate Power Supply
for the Electric Lock

+   - Electric
Lock

Gnd

Power

Proxess
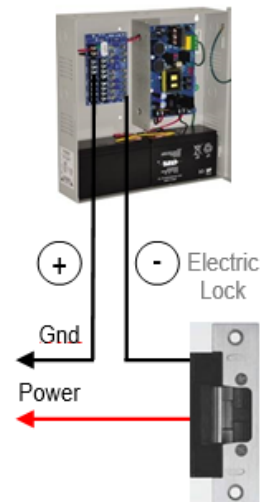
SAMPLE DOOR DEVICE LAYOUT AND CONNECTIVITY

2-CONDUCTOR 18 AWG. BELDEN CABLE #9409 For OPTIONAL ALARMS

CEILING TILE or SURFACE MOUNTED ACCESS CONTROL UNIT POE or POE+ POWER

OPTIONAL (IF NO POE) 12 VDC POWER SUPPLY

CAT-5 or -6 POE or POE+ COMMUNICATION AND POWER

CONDUIT EMBEDDED IN THE WALL

CONDUIT EMBEDDED IN THE WALL

CEILING LINE

2-CONDUCTOR 22 AWG. BELDEN CABLE #9407 (OR EQUIVALENT) UNSHIELDED FOR PUSH BUTTON

2-CONDUCTOR 22 AWG. BELDEN CABLE #9407 (OR EQUAL) UNSHIELDED FOR DOOR CONTACT.

2-CONDUCTOR 18 AWG. BELDEN CABLE #9409 (OR EQUIVALENT) UNSHIELDED, FOR DOOR STRIKE

4-CONDUCTOR 22 AWG. BELDEN CABLE #9944 (OR EQUAL) FOR CARD READER (TYPICAL)

EMBEDDED J-BOX OPEN ON ENTRY SIDE FOR CARD READER

MAGNETIC DOOR CONTACT SWITCH EMBEDDED IN THE DOOR FRAME.

EMBEDDED J-BOX OPEN ON SECURED SIDE FOR REQUEST TO EXIT BUTTON

DOOR FRAME

2-CONDUCTOR 18 AWG. BELDEN CABLE #9409 (OR EQUIVALENT) FOR DOOR STRIKE.

CARD READER

OPTIONAL REQUEST TO EXIT BUTTON at SECURED SIDE to Unlock Door

DOOR

ELECTRIC DOOR STRIKE EMBEDDED IN THE DOOR FRAME.

FINISHED FLOOR