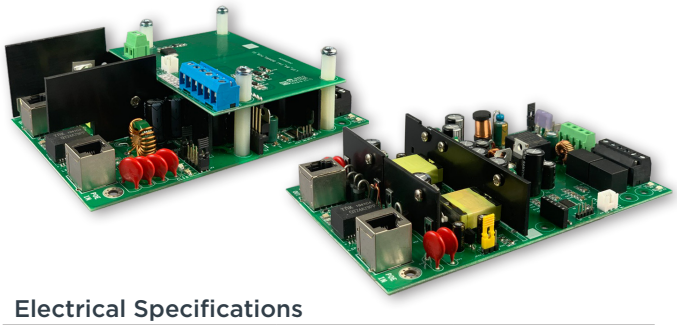
LifeSafety Power®

BiTSTREAM™ BX series

PoE-powered Access Control Power Supplies
FAI / 50W or 75W / CE
UL294 Listed for Access Control

BiTSTREAM™
power • data • firedrop over ethernet



Electrical Specifications

Power Supply Board	BX50	BX75
Input	PoE 90W Maximum	
Total Max Output	50W	75W
Max System Power Output	2A/12V	6.2A/12V*
Max Lock Power Output	2A/12V or 1A/24V	3.1A/24V**
Fire Alarm Disconnect	via BT500	Local
Local Battery Backup	System	System & Lock
Battery Type	Sealed Lead Acid (SLA) or Lithium Iron Phosphate (LFP)	
System BTU/Hr	34	41
Full Load Efficiency	84%	88%
Operating Temperature	-4 to +122F (-20 to +50C)	
Board Size (inches)	4 x 6 x 1.18	4 x 6 x 1.78
Board Weight	1 lb	1 lb

**BX75 System Power Output limited to 5.0A when battery is connected*
***BX75 Lock Power Output limited to 1.9A when battery connected*

BX Key Benefit
Fire Alarm Disconnect - local or centralized Fire Over Ethernet™
Built-In Charger - supports SLA or Lithium Iron Phosphate batteries
OutSmart™ - visual voltage verification technology
Built in low battery cutoff - prevents deep discharge
FlexPower Modularity - Works with any LSP enclosure or accessory
Separate Fault Relays - Separate PoE and Battery Fault Relays

Ordering

Model No*	Description	Enclosure
BX50-Boxed	50W power supply board	N/A
BX50-E5	50W ps small enclosure	8.5H x 11W x 3D
BX50-E1	50W ps medium enclosure	14H x 12W x 4.5D
BX50-D8E1	50W ps, 8 aux outputs, med enclosure	14H x 12W x 4.5D
BX75-Boxed	75W power supply board	N/A
BX75-C4E1	75W ps, 4 lock outputs, med enclosure	14H x 12W x 4.5D
BX75-C8E1	75W ps, 8 lock outputs, med enclosure	14H x 12W x 4.5D
BX75-C8D8E1	75W ps, 8 lock, aux outputs, med enclosure	14H x 12W x 4.5D

**BX modularity allows for other configuration options. See model builder examples.*

BT 802.3bt | FoE™ | SURECHARGE™ | NETLINK™ | GLOBAL VAC

Overview

BitStream BX series access control power supplies convert PoE to 12 and 24VDC power for use in access control, surveillance, or other applications.

- **BX50** is compatible with the Fire Over Ethernet™ (FoE) mode of the BT500 PoE midspan injector. FoE provides fire alarm control of the BX50 lock output through a single fire alarm disconnect at the BT500. Local battery backup using SLA or LFP batteries provides backup for the 12V system output.

- **BX75** is a fully 802.3BT compatible PoE splitter, providing local fire alarm lock control through a fire alarm disconnect at the BX75. A built-in battery charger for SLA or LFP batteries provides local backup of both the system and lock outputs.

Family Specifications

Input:
- PoE 802.3bt, 90W Maximum

Outputs:
- System Power Output (12VDC)
- Lock Power Output (BX50: 12/24VDC | BX75: 24VDC)
- Local Fire Disconnect Lock Control (BX75)
- Central Fire Disconnect Lock Control (BX50 via BT500)
- Overload & short circuit protection with auto-restart

Battery Backup:
- Built-in battery charger for local backup
- Charges Sealed Lead Acid (SLA) or Lithium Iron Phospate
- Auto switchover to battery with zero transfer time
- Integrated low battery cutoff

Supervision:
- PoE fail, Battery fail (Separate form "C")
- Low power shutdown when battery voltage too low

Local Fire Alarm Disconnect Input (BX75):
- DC voltage: 9 to 28VDC, 3 to 15mA
- Dry contact NO/NC
- Optional Fire Alarm latching

LED Visual Indicators:
- System output, lock output, PoE fault, battery fault, fire alarm activation (BX75), PoE Class (BX75)

Agency Approvals:
- UL294, UL2610
- ULC S318
- FCC PART 15, Subpart B
- ROHS Leadfree / CE

BX - PoE Access Power Supplies

High Power | FAI | SLA/LFP Battery

BX50 FEATURES

Fire Over Ethernet™ (FoE) When paired with a BT500 midspan injector, the BX50 can drop lock power on a fire alarm condition from one central FAI connection at the BT500. This eliminates the need to pull wiring for an FAI connection to each door.

SLA or LFP Battery Charger Selectable battery charger allows the use of newer technology LFP batteries, or more readily available and lower cost SLA batteries for local backup of System Power (Lock power only backed up when using a midspan battery set).

50W DC Output High power output of 50W combined system/lock power is ideal for 1-2 door EDGE applications

OutSmart™ Visual Voltage Indication Output LEDs indicate voltage available - Green/12V or Blue/24V.

FlexPower Modularity Works with all LSP FlexPower enclosures and accessory boards.

On-Board Low Battery Disconnect Automatically disconnects discharged battery sets to prevent deep discharge and protects sentitive electronics.

BX75 FEATURES

Local Fire Alarm Connection Allows fire alarm control of locks with any PoE source. (Note the BX75 is not compatible with the BT500's FoE mode).

SLA or LFP Battery Charger Selectable battery charger allows the use of newer technology LFP batteries, or more readily available and lower cost SLA batteries for local backup of System and Lock Power.

75W DC Output High power output of 75W combined system/lock power is ideal for 1-4 door Access Control or EDGE applications

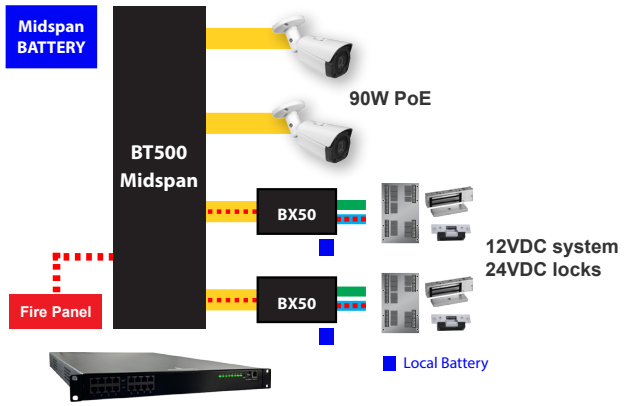
OutSmart™ Visual Voltage Indication Output LEDs indicate voltage available - Green/12V or Blue/24V.

FlexPower Modularity Works with all LSP FlexPower enclosures and accessory boards.

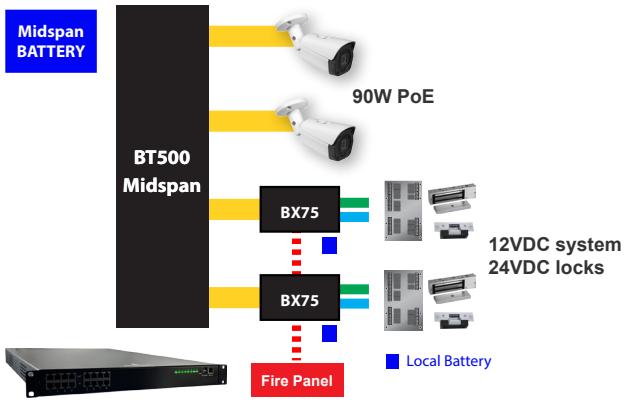
On-Board Low Battery Disconnect Automatically disconnects discharged battery sets to prevent deep discharge and protects sentitive electronics.

APPLICATIONS

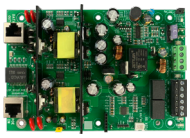
BX50 Fire Over Ethernet™



BX75 Local Fire Alarm Disconnect



BITSTREAM™ FAMILY



BX50

BX75

BT500 Series

Model No*	Description	Size
BX50-Boxed	50W power supply board	N/A
BX50-E5	50W ps small enclosure	8.5H x 11W x 3D
BX50-E1	50W ps medium enclosure	14H x 12W x 4.5D
BX50-D8E1	50W ps, 8 aux outputs, med enclosure	14H x 12W x 4.5D
BX75-Boxed	75W power supply board	N/A
BX75-C4E1	75W ps, 4 lock outputs, med enclosure	14H x 12W x 4.5D
BX75-C8E1	75W ps, 8 lock outputs, med enclosure	14H x 12W x 4.5D
BX75-C8D8E1	75W ps, 8 lock, aux outputs, med enclosure	14H x 12W x 4.5D

**BX modularity allows for other configuration options. See model builder examples.*

MODEL BUILDER

BX 75 - C4 D8 NL4 E2

BiTSTREAM™ POE ACCESS POWER

MODEL
BX50 | BX75

ACCESSORY BOARDS
C4 - 4 controlled
C8 - 8 controlled
D8 - 8 auxiliary
M8 - 8 managed
NL4 - Network Module

ENCLOSURE
E5 - 8.5" x 11" x 3"
E1 - 14" x 12" x 4.5"
E2 - 20" x 16" x 4.5"

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IMPORTANT
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