LifeSafety Power®

BitStream™ BX Series

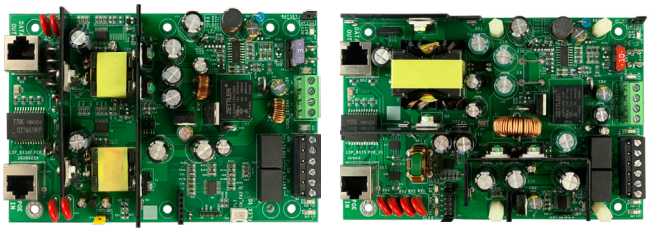
PoE Power Extractor Splitters

50W or 75W

FAI / CE / UL294 Listed

BITSTREAM™

power • data • single-point fire interface



Overview

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

- **BX50** is compatible with the Single Point Fire Alarm Interface (SFI) mode of the BT500 PoE midspan injector. SFI 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.

BX Key Benefits
Fire Alarm Disconnect - Single Point Fire Interface (with BX50)
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

Family Specifications

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

Electrical Specifications

Power Supply Board	BX50	BX75
Input	PoE 802.3bt, 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

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

Ordering

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

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

BX50 FEATURES

SFI When paired with a BX50 PoE splitter, the BTS can drop lock power on a fire alarm condition from a single fire alarm disconnect at the BTS. This eliminates the need to pull wiring for an FAI connection to each door, saving cost and simplifying installation.

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 SFI 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.

MODEL BUILDER

BX 75 - C4 D8 NL4 E2

BiTSTREAM™ POE ACCESS POWER

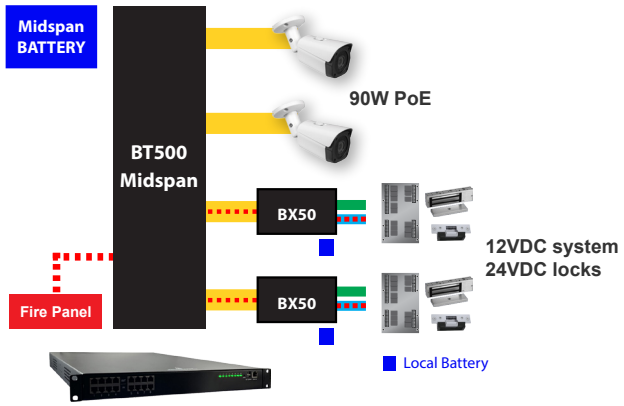
MODEL
BX50 | BX75

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

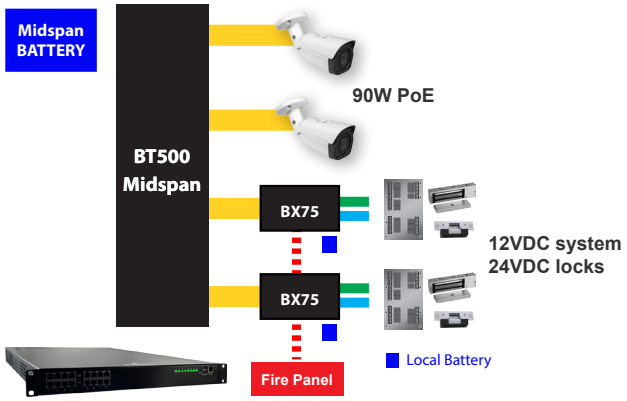
ENCLOSURE
E5 - 8.5" x 11" x 3"
E1 - 14" x 12" x 4.5"
E2 - 20" x 16" x 4.5"

APPLICATIONS

BX50 Proprietary Single-point Fire Interface™



BX75 Local Fire Alarm Disconnect



BITSTREAM FAMILY

BTS500-8R

BT500-8R / BT500-16R

BTS500 PoE Endspan Switch
8 PoE network devices
500W total power, 90W per port
Local fire alarm disconnect for UL294 compliance

BT500 PoE Midspan Injector
8 or 16 PoE compliant devices
500W total power, 90W per port
Local fire alarm disconnect for UL294 compliance

See BitStream Midspan and Switch datasheets for more information.

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