

Features and Functions

Monitoring and reporting **FLEXPOWER®** systems for

- ◆ System integrity / battery health / output condition
- ◆ 1000 Event Buffer

Remote diagnostics and service features

- ◆ Monitor health and status of host power supply, battery set, and up to *192 individual outputs** (**requires Gen2 M8 modules*)
- ◆ Auto-schedule, test, and report battery standby time
- ◆ Remote supervision of battery's state of charge
- ◆ Monitoring internal cabinet temperature
- ◆ Monitoring external room temperature with over/under temp alert
- ◆ Remote power cycling control of external equipment
- ◆ Time/Date stamp log reports last 1000 events

Email notification on

- ◆ AC and system fault conditions
- ◆ Aging or drained battery, battery not meeting standby specification
- ◆ Fire Alarm Interface (FAI) activation
- ◆ External room temperature outside preset limit
- ◆ External Event activation
- ◆ Output condition (requires M8 module)
 - Over voltage or over current | voltage loss | lock cycle count exceeded

SNMP set and trap notification

- ◆ Version 1, 2, or 3

Hardened Cybersecurity

- ◆ Encrypted password, user and certificate logging. Contact factory for full feature list.

Agency Listings UL294, UL1076, UL603, ULC S318, S319, CSA C22.2 #205

Lifetime Warranty

Overview

NETLINK™ NLX module is part of LifeSafety Power's Flex-Power® modular power management system for security and life safety applications.

NLX is an eight data port network module that communicates and controls power status over a local or wide area network. NLX also features an RS485 port to allow monitoring of up to 16 additional local or remote LSP devices through Distributed Power Monitoring.

Distributed Power Monitoring (DPM™) Features

- ◆ Monitor up to 96 doors plus the power supplies and batteries through a single network drop
- ◆ Reduces network drop installation costs & maintenance fees
- ◆ Reduces Cost Per Door by up to 20%
- ◆ Maximum distance of 2000 feet
- ◆ Monitor up to 24 LifeSafety Power devices across multiple enclosures

Parameters Monitored

NLX monitors the following parameters. Most parameters also have programmable upper and lower thresholds for custom alerting.

- ◆ Power Supply AC Input Voltage
- ◆ Power Supply Output Voltage
- ◆ Power Supply Output Current
- ◆ Battery Charge Current
- ◆ Battery Voltage
- ◆ Battery Standby Time Measurement / Alert
- ◆ Power Supply Faults
- ◆ Lock Output Voltage
- ◆ Lock Output Current
- ◆ Impending lock failure
- ◆ Lock cycle count
- ◆ Tamper Switch
- ◆ External Temperature
- ◆ External Voltage
- ◆ External Current (x4)

Ordering

NLX 8 port/RS485 network module includes eight (8) RSMOD boards

Mechanical Information

Size: 6" x 4" x 0.75" Weight: .4 lb.

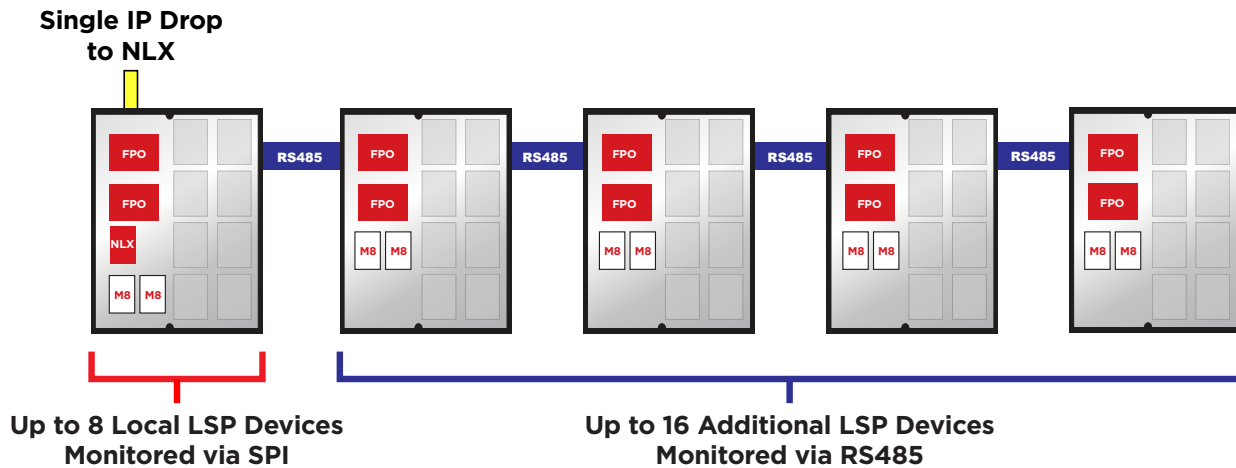
Cables and mounting hardware provided

Distributed Power Monitoring Architecture

The NLX introduces Distributed Power Monitoring (DPM), allowing the lowest cost per door in multi-enclosure network managed applications.

Using DPM, the first enclosure contains a single NLX, which can monitor up to 24 LSP devices within multiple enclosures throughout a building (up to 2000 feet) through a single network drop, saving hardware, installation, and maintenance costs.

In the example scenario below, the first enclosure monitors the 16 door power system locally through the NLX SPI ports, while four additional 16 door systems are monitored through RS485 by the NLX within the first enclosure. This saves the cost of four additional NetLink devices plus four network drops and any recurring fees they may incur.

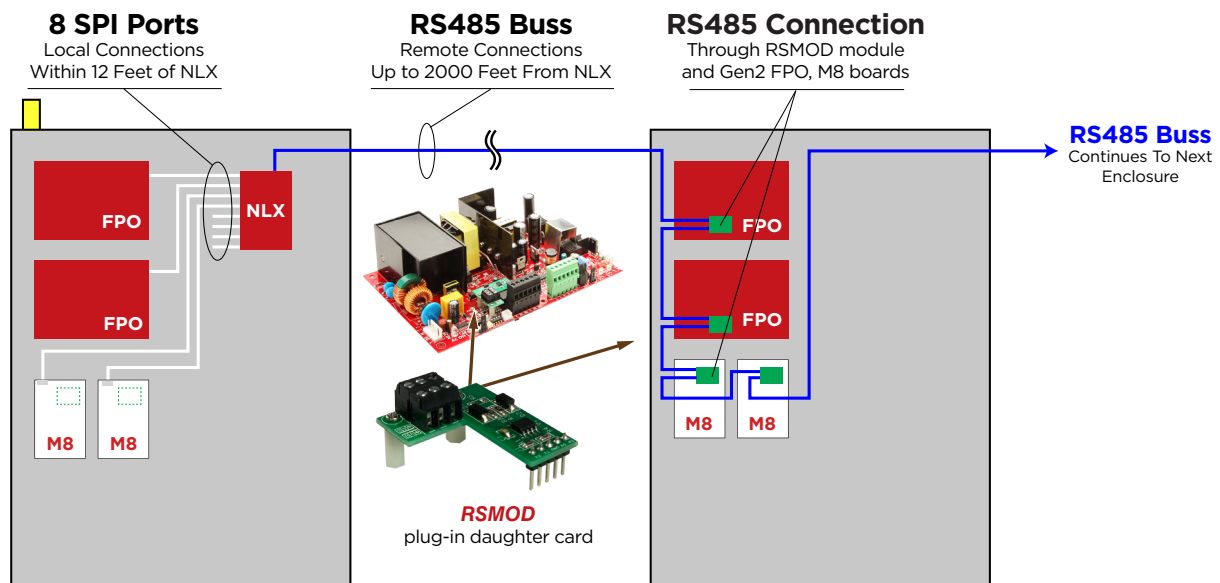


SPI Ports (Local Connections)

Eight SPI ports are provided for connection to LSP devices within the same enclosure as the NLX or in enclosures directly adjacent to the NLX (within 12 feet).

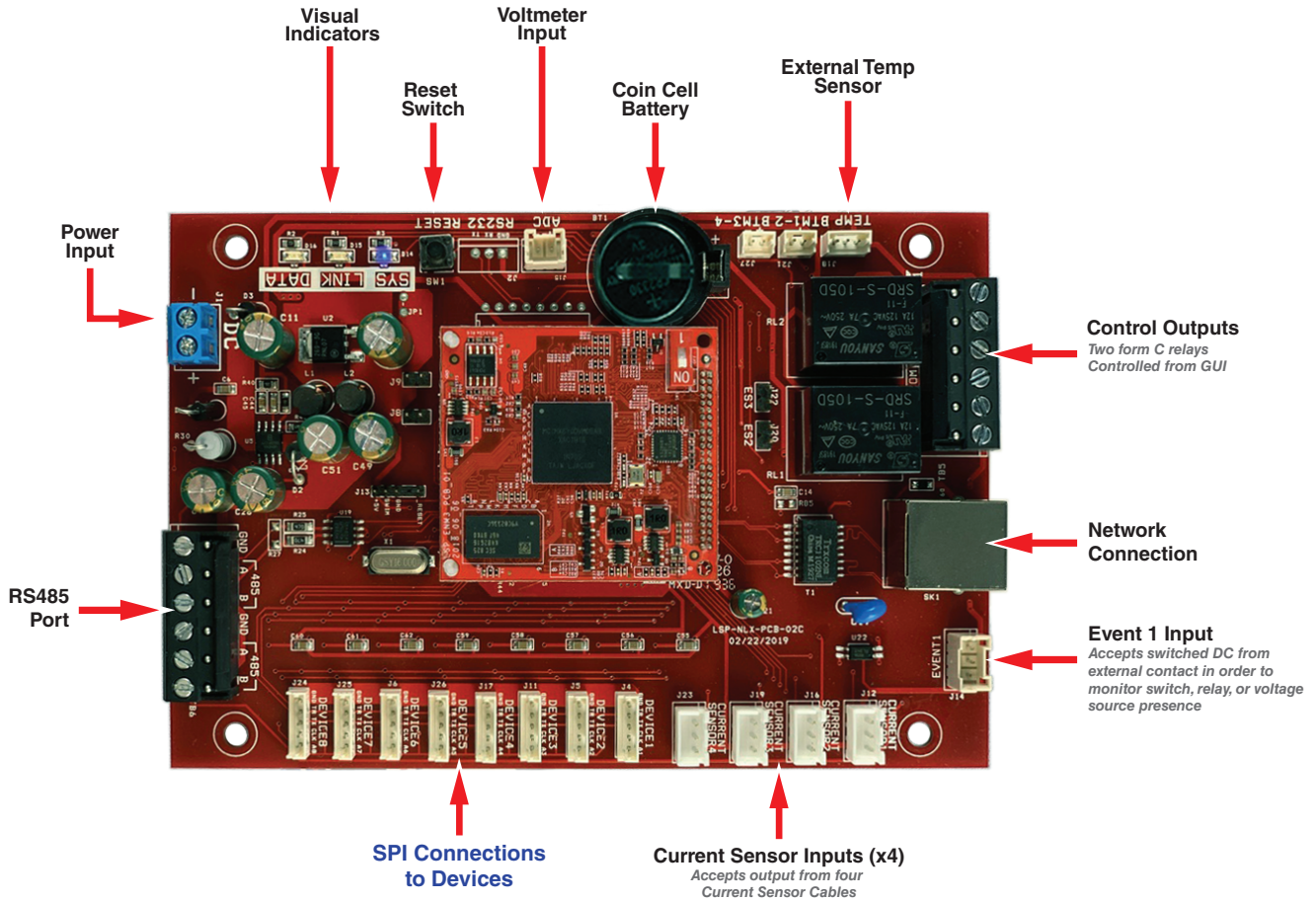
*RS485 (Remote Connections)

Up to 16 additional remote devices may be connected to the NLX through the on-board RS485 port. To connect these devices to the RS485 buss, the optional RSMOD daughter card needs to be installed on each FPO and M8 board in the RS485 loop. Eight RSMOD boards are included with the NLX - additional RSMOD boards may be ordered separately.



**RS485 Buss requires 2nd Generation FPO power supplies & M8 boards with the optional RSMOD daughter card plug in*

NLX Module Details



Note - Please see the NetLink manual for full connection details.

Power Input - Easy terminal strip connection for NLX power

RS485 Port - Allows remote communication with up to sixteen LifeSafety Power devices for Distributed Power Monitoring

SPI Connections to Devices - Local connection for up to eight LifeSafety Power devices

Current Sensor Inputs - measures the current draw of a non-managed output, such as from a B100.

Event 1 Input - Monitors the enclosure tamper switch or other switched DC sources

Network Connection - Communication to and from the local network to the NLX

Control Outputs - Dual Form-C relay outputs which can be controlled from the NLX interface. Useful for controlling or power cycling devices

External Temperature Sensor - Measures the temperature of the IDF closet - programmable limits.

Coin Cell Battery - Backs up the real time clock in the event of a complete power failure

Voltmeter Input - measures the voltage of a non-managed output, such as from a B100

Reset Switch - Manually resets the user name and/or IP address to default

Visual Indicators - Display the status of the NLX and the network connection

NLX Browser Home Screen

Network Dashboard

- ◆ Internal / external temperature sensors
- ◆ Current sensor reading
- ◆ Voltage sensor reading
- ◆ Event activation condition
- ◆ Service due report
- ◆ System log report
- ◆ Relay on/off control

NetLink connected devices

- ◆ Up to 8 power supplies
- ◆ Up to 24 M8 boards
- ◆ Up to 24 total devices
- ◆ Visual status of device condition

Report Screen

- ◆ Set up screen
- ◆ What to report, when to report

Configure Screen

- ◆ Network, email, SNMP settings
- ◆ Current sensor calibration
- ◆ Battery life/capacity setting

Programming Screen

- ◆ Set FPO battery charge current
- ◆ Set fault report delays
- ◆ Reset timer for new battery installation
- ◆ Reset fault counters

Tools Screen

- ◆ Upgrade software
- ◆ System reboot
- ◆ System activity log

Device	ID	Model	Location	Status	Voltage	Device	ID	Model	Location	Status	Voltage
1	FP-1	G2 FPO250	Location1	●	12.24 VDC	2	FP-2	G2 FPO250	Location1	●	24.63 VDC
3	FP-3	G2 FPO150	Location2	●	24.75 VDC	4	FP-4	G2 FPO150	Location2	●	12.27 VDC
5	FP-5	FPO75	Location3	●	24.69 VDC	6	FP-6	FPO75	Location3	●	12.31 VDC
7	FP-7	FPO75	Location4	●	24.51 VDC	8	FP-8	FPO75	Location4	●	12.43 VDC
9	FP-9	FPG100	Location5	●	12.62 VDC	10	FP-10	FPG200	Location5	●	25.01 VDC
11	FP-11	G2 FPO150	Location6	●	12.27 VDC	12	FP-12	G2 FPO250	Location6	●	24.93 VDC

Monitoring / Reporting / Test / and Control Functions

Monitored Parameters
Power Supply Output Voltage
AC Fault Status
System Fault Status
Fire Alarm Input Status
Battery Voltage and Charge Current
Battery Age
External Room Temperature
Total Number of System Faults
Total Number of AC Faults
DC Load Current (system or battery)
DC Output Voltage (system and battery)
Event 1 (user specified)

Programmable Functions
AC Fault Delay
System Fault Delay
System Install Date
Reset Fault Counters
Optimal Battery Charge Current
Reset Battery Age Counter
Battery Replacement Period
Temperature, Current, Voltage Trigger Parameters

Control Functions
Relay 1 (on or off)
Relay 2 (on or off)

Event-triggered Email Alerts & Reports
AC or System Fault Occurrence
FAI Activation Occurrence
Low Battery Occurrence
Battery Load Test Completed
General System Status Report
Scheduled System Service Due Alert
Battery Replacement Due Alert
External Temperature Sensor Alert
Event Activation Alert (user specified)

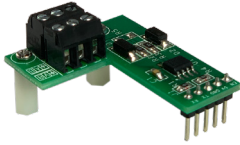
Test Functions
Battery run time capacity
Battery state of charge

Ordering

		Mechanical Information
NLX	8 port/RS485 network module	Size: 6" x 4" x 0.75" Weight: .4 lb.
RSMOD	RS485 module for Gen2 FPO/M8	Size: 1.5" x 1.3" x .9" Weight: .1lb.
RSMOD-QTY-8	Quantity 8 RSMOD for Gen2	Size: 1.5" x 1.3" x .9" Weight: .1lb. ea

Cables and mounting hardware provided. Eight RSMOD boards provided.

Note: Remote monitoring of 16 devices through RS485 requires Gen2 FPO and M8 modules with the optional RSMOD daughter card plug-on. Eight RSMOD boards are included with each NLX.



RSMOD daughter card for RS485 communication.

Electrical Ratings

	Specification
Input Operating Voltage	8 to 30 VDC
Input Operating Current	120 mA nominal
Network Data Rate	10/100 Mbps
Voltage Measurement Range	0 to 30 VDC $\pm 3\%$ (10-30V)
Current Measurement Range	0 to 20A $\pm 0.1A$ +5% of reading
Event Input	8 to 30 VDC
Output 1, 2 (relay contacts)	5A Maximum



Application Example - FPO150/150-6M8NLXE4

A large higher-education facility constructing a new residence hall had the requirement of monitoring over 200 new door openings in the smallest possible footprint.

By utilizing multiple FPO150/150-6M8NLXE4 power systems, they were able to manage 48 openings within each 24x20 enclosure.

The NLX monitors all 48 outputs as well as power supply status, battery condition, AC line voltage and other critical features - all from a single network drop.

LifeSafetyPower.com

(888) 577-2898
info1@lifesafetypower.com

Specifications subject to change without notice.

© 2021 LifeSafety Power LLC. All rights reserved. LifeSafety Power and FlexPower are registered trademarks of LifeSafety Power. All other trademarks and copyrights are the property of their respective owners.

P01-1066A 06/21

LifeSafety Power
10027 S. 51st Street, Suite 102
Phoenix, AZ 85044 USA