**Description**

The **LIFESAFFETY POWER NETLINK™ NLX** module is part of FLEXPOWER’s patented power management system for security and life safety applications. NLX has the ability to monitor up to 24 LifeSafety Power devices (FPO power supplies or M8 intelligent relay control boards (Gen2 versions)) through a LAN or WAN. The NLX provides eight SPI ports for connection to local FlexPower devices to enable monitoring and control of the power system. The NLX also provides an RS485 port for distributed power monitoring of an additional 16 remote FlexPower Generation 2 devices. Cost per door savings of 20% or more are possible through reduced hardware and network drops.

Typical data gathered and reported includes operational fault status, power supply output voltage, battery charging voltage, battery charging current, and fire alarm input status. Automated reports may be generated on any detected fault condition, battery aging, fire alarm interface activation, and event activation, or on a time base for scheduled confirmation of proper operation. A time and date stamped log of the past 1000 events is kept as history in a buffer and may be accessed as a scheduled report, or immediately on an alert or occurrence. The buffer update period is programmable from 5 minutes to 24 hours.

In addition to the SPI and RS485 connections, the NLX provides four current sensor inputs, a remote temperature sensor input, a volt meter input, and a contact monitor input. The current, voltage, and temperature sensors may be given upper and lower limits to trigger an alert if the measured value goes out of range. The contact monitor input may be programmed to respond to either a normally open or normally closed contact or voltage presence or loss. Two on-board relays are also provided for use in controlling or power cycling external equipment.

**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 / output power cycled

**SNMP set and trap notification**
- Version 1, 2, or 3

**Hardened Cybersecurity**
- Encrypted password, user and certificate logging. Contact factory for full feature list.

**Ordering**

<table>
<thead>
<tr>
<th>Mechanical Information</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input Operating Voltage</strong></td>
<td>9 to 30 VDC</td>
</tr>
<tr>
<td><strong>Input Operating Current</strong></td>
<td>120 mA nominal</td>
</tr>
<tr>
<td><strong>Network Data Rate</strong></td>
<td>10/100 Mbps</td>
</tr>
<tr>
<td><strong>Voltage Measurement Range</strong></td>
<td>1 to 30 VDC ±5%</td>
</tr>
<tr>
<td><strong>Current Measurement Range</strong></td>
<td>0 to 20A ±0.1A ±5% of reading</td>
</tr>
<tr>
<td><strong>Event Input</strong></td>
<td>9 to 32 VDC</td>
</tr>
<tr>
<td><strong>Output 1, 2 (relay contacts)</strong></td>
<td>5A Maximum</td>
</tr>
</tbody>
</table>

**Agency Listings**
- UL294, UL603, UL1076, cUL S318, cUL S319

**Lifetime Warranty**
**NLX Communication Module**

**NLX Connection Architecture**

The NLX provides two connection methods, offering flexibility as well as a reduction in the number of network drops required in larger systems. Installations may use one or both connection methods as the application requires.

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**Single IP Drop to NLX**

- Up to 8 Local LSP Devices Monitored via SPI
  - Monitored via SPI
  - Up to 16 Additional LSP Devices Monitored via RS485
  - (requires Gen2 FPO/M8)

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**SPI Ports (Local Connections)**

Eight SPI ports are provided for connection to Generation 1 or 2 LSP devices within the same enclosure as the NLX or in enclosures directly adjacent to the NLX (within 12 feet).

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**RS485 (Remote Connections)**

Up to 16 additional remote devices (FPO or M8) 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.

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**RS485 Buss**

- Local Connections Within 12 Feet of NLX
- Remote Connections Up to 2000 Feet From NLX
- Through RSMOD module and Gen2 FPO, M8 boards

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*RS485 Buss requires 2nd Generation FPO power supplies & M8 boards with the optional RSMOD daughter card plug in - available 3rd Quarter 2020*
NetLink 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

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
Module Connections

Visual Indicators

Voltmeter Input

External Temp Sensor

Power Input

Dual ADC Jumper

Event 1 Jumper

RS485 Port

Connection to Devices

Current Inputs (x4)

Accepts output from four Current Sensor Cables

Control Outputs

Two form C relays Controlled from GUI

Event 1

Accepts switched DC from external contact in order to monitor switch, relay, or voltage source presence

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

LifeSafetyPower.com

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Specifications subject to change without notice.

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