Description

The LIFESAFETY 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) 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 is updated once per hour with all parameters in normal range.

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 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, and more

Electrical Ratings

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

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

Lifetime Warranty

Cables and mounting hardware provided
**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.

**Single IP Drop to NLX**

Up to 8 Local LSP Devices Monitored via SPI

Up to 16 Additional LSP Devices Monitored via RS485

RS485 connection option available on Gen2 FPO (red) power supplies (available late QII)

**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).

**RS485 (Remote Connections)**

Up to 16 additional remote Generation 2 LSP devices may be connected to the NLX through the on-board RS-485 port. These devices require the optional RS485 module (RSMOD) to be installed.
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
- Device on/off control

NetLink connected devices
- Two power supplies and 16 managed outputs
- One power supply and 24 managed outputs
- 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 instal
- Reset fault counters

Tools Screen
- Upgrade software
- System reboot
- System activity log

Monitoring / Reporting / Test / and Control Functions

<table>
<thead>
<tr>
<th>Monitored Parameters</th>
<th>Programmable Functions</th>
<th>Event-triggered Email Alerts &amp; Reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Supply Output Voltage</td>
<td>AC Fault Delay</td>
<td>AC or System Fault Occurrence</td>
</tr>
<tr>
<td>AC Fault Status</td>
<td>System Fault Delay</td>
<td>FAI Activation Occurrence</td>
</tr>
<tr>
<td>System Fault Status</td>
<td>System Install Date</td>
<td>Low Battery Occurrence</td>
</tr>
<tr>
<td>Fire Alarm Input Status</td>
<td>Reset Fault Counters</td>
<td>Battery Load Test Completed</td>
</tr>
<tr>
<td>Battery Voltage and Charge Current</td>
<td>Optimal Battery Charge Current</td>
<td>General System Status Report</td>
</tr>
<tr>
<td>Battery Age</td>
<td>Reset Battery Age Counter</td>
<td>Scheduled System Service Due Alert</td>
</tr>
<tr>
<td>External Room Temperature</td>
<td>Battery Replacement Period</td>
<td>Battery Replacement Due Alert</td>
</tr>
<tr>
<td>Total Number of System Faults</td>
<td>Temperature, Current, Voltage Trigger Parameters</td>
<td>External Temperature Sensor Alert</td>
</tr>
<tr>
<td>Total Number of AC Faults</td>
<td></td>
<td>Event Activation Alert (user specified)</td>
</tr>
<tr>
<td>DC Load Current (system or battery)</td>
<td></td>
<td>Test Functions</td>
</tr>
<tr>
<td>DC Output Voltage (system and battery)</td>
<td></td>
<td>Battery run time capacity</td>
</tr>
<tr>
<td>Event 1 (user specified)</td>
<td></td>
<td>Battery state of charge</td>
</tr>
</tbody>
</table>

Control Functions
- Output 1 (on or off)
- Output 2 (on or off)
Module Connections

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