

OrionLX™ Tile Annunciator

The OrionLX Tile Annunciator is a web-based software-defined alarm annunciation product. The Tile Annunciator webpages are served directly from an OrionLX automation platform and provide simplified setup, categorization and viewing of active and acknowledged alarms in substation HMI and web-based SCADA applications.

Any data point in the OrionLX database, either obtained from attached IEDs or calculated, can be designated as an alarm point and displayed on the Tile Annunciator.

The Tile Annunciator is available on the OrionLXm or the OrionLX with the "CPX" High Performance CPU. Tile sizing, text sizing and page layout is optimized for use with the NovaTech 19" rack mount touchscreen monitor.

Summary of Features:

- Up to 60 alarm tiles per page, up to 24 pages; Total 1440 alarms
- Time-stamping to the precision of the point source, usually 1mS
- Tiles can be assigned either Orion point name, Alias* name, or user-defined name
- Alarm history provided
- Alarm state retained through power cycling
- User-defined alarm ON message and alarm OFF message
- Simple set-up in NovaTech Configuration Director ("NCD")

OrionLX Ordering Information:

Option #108. Requires the Alarm-Archive-Retentive (AAR) option. For OrionLX CPX or OrionLXm only.

Configuration Steps:

1. Select the points in the OrionLX database that should be alarm points.
2. Configure alarm parameters (ON state, OFF state, alarm message, retentive, etc.).
3. Add a Tile Annunciator page and name it.
4. Move alarm points to tiles using grid row and column coordinates (R1 C2, R2 C1, etc.).
5. Rename tiles as desired.
6. View tile arrangement. Rearrange tiles as desired using simple drag and drop.

Port Options: Delete Port Close Port

Page Options: Accept Cancel

High Side Breaker Alarms Settings

Description: High Side Breaker Alarms

Point Name Alias

Binary	Analog
Comm Fail @551-Line1-Primary	
Comm Fail @50 Series (Primary)	
Login Telnet Session Status @Orion Internal	
Line 3 421 Failure @Logic	
Line 1 421 Failure @Logic	
Comm Fail @Bitronics 871	
Comm Fail @50 Series (Secondary)	
Local Root Session Status @Orion Internal	
Login TTY Session Status @Orion Internal	
PPP Session Status @Orion Internal	
Remote Root Session Status @Orion Internal	
Secure Passthru Session Status @Orion Internal	
HTTP Session Status @Orion Internal	
Pro FTPD Session Status @Orion Internal	
Line 1 L90 Failure @Logic	
Line 1 75% Breaker Wear @Logic	
Line 1 Low SF6 Pressure @Logic	
Line 1 Long Breaker Op Time @Logic	
Line 2 Low SF6 Pressure @Logic	
Line 2 75% Breaker Wear @Logic	
Line 2 Long Breaker Op Time @Logic	
Line 3 Long Breaker Op Time @Logic	
Line 3 L90 Failure @Logic	
Line 3 Low SF6 Pressure @Logic	
Line 3 75% Breaker Wear @Logic	
Feeder 231 F60 Failure @Logic	
Feeder 232 F60 Failure @Logic	
Feeder 233 F60 Failure @Logic	

Drag/Drop points to reorder Rows 3 Cols 3

Point Name	Tile Name
R1 C1 Line 1 75% Breaker Wear @Logic	Line 1 75% Breaker Wear
R1 C2 Line 1 Low SF6 Pressure @Logic	Line 1 Low SF6 Pressure
R1 C3 Line 1 Long Breaker Op Time @Logic	Line 1 Long Brkr Op Time
R2 C1 Line 2 75% Breaker Wear @Logic	Line 2 75% Breaker Wear
R2 C2 Line 2 Low SF6 Pressure @Logic	Line 2 Low SF6 Pressure
R2 C3 Line 2 Long Breaker Op Time @Logic	Line 2 Long Brkr Op Time
R3 C1 Line 3 75% Breaker Wear @Logic	Line 3 75% Breaker Wear
R3 C2 Line 3 Low SF6 Pressure @Logic	Line 3 Low SF6 Pressure
R3 C3 Line 3 Long Breaker Op Time @Logic	Line 3 Long Brkr Op Time

1 Line 1 75% Breaker Wear Line 1 Low SF6 Pressure Line 1 Long Brkr Op Time

2 Line 2 75% Breaker Wear Line 2 Low SF6 Pressure Line 2 Long Brkr Op Time

3 Line 3 75% Breaker Wear Line 3 Low SF6 Pressure Line 3 Long Brkr Op Time

Tiles as they will appear

* "Alias" is a feature in the OrionLX that enables users to assign an alternate name for Orion database points. This alternate name can be used in multiple Orion applications such as Alarming, SCADA, and Sequence of Events.

Tile Annunciator in Operation

Below are three Tile Annunciator pages (each captured at a different time):

High Side Breaker Alarms Acknowledge all on page

Line 1 75% Breaker Wear	Line 1 Low SF6 Pressure	Line 1 Long Brkr Op Time
Line 2 75% Breaker Wear	Line 2 Low SF6 Pressure	Line 2 Long Brkr Op Time
Line 3 75% Breaker Wear	Line 3 Low SF6 Pressure	Line 3 Long Brkr Op Time

On this “High Side Breaker Alarms” page, one active unacknowledged alarm is shown.

The “Security Alarms” page has two active alarms.

The “Protective Relay Failure” page has one active alarm.

Security Alarms

User logged in using telnet	User logged in using HTTP	FTP File transfer in progress
PPP session established	User logged in at root remotely	User logged in at root locally
User logged into front port	User Passthrough to SEL Relay	

On this “Security Alarms” page, two active acknowledged alarms are shown.

The “High Side Breaker Alarm” page has one point that was in alarm but went out of alarm, but was not acknowledged.

Protective Relay Failure Acknowledge all on page

Line 1 SEL-421 Failure	Line 2 SEL-421 Failure	Line 3 SEL-421 Failure	Logic_Line 1 L90 Failure	Logic_Line 2 L90 Failure	Logic_Line 3 L90 Failure
Logic_Bus 1 487-B Failure	Logic_Bus 2 B30 Failure				
Logic_Feeder 231 F60 Failure	Logic_Feeder 232 F60 Failure	Logic_Feeder 233 F60 Failure	Logic_Feeder 234 F60 Failure	Logic_Feeder 235 F60 Failure	Logic_Feeder 236 351S Failure
Logic_Feeder 237 351S Failure	Logic_Feeder 238 351S Failure	Logic_Feeder 239 351S Failure			

On this “Protective Relay Failure” page, one point that was in alarm went out of alarm and was not unacknowledged. The “High Side Breaker Alarm” page has one point that was in alarm but went out of alarm, but was not acknowledged. No alarms on the “Security Alarms” page.

