

New Bitronics Pole Top Power Monitor

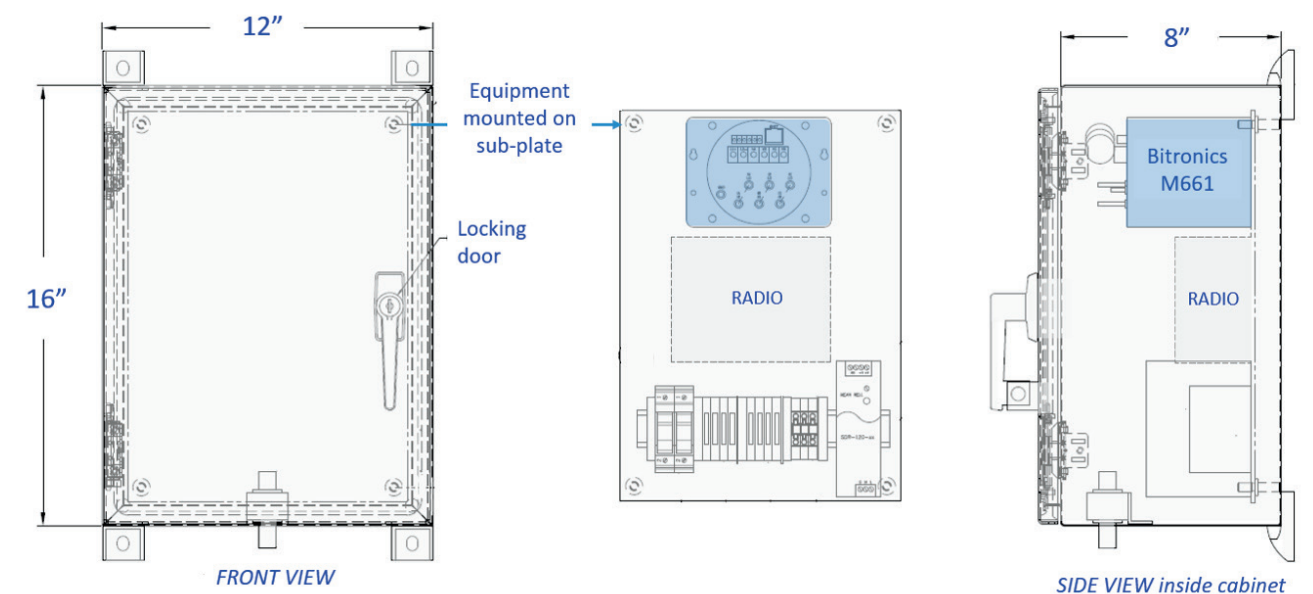
As the need for distribution reliability and quality increases, so does the need for real-time data on distribution operating conditions and fault status. Bitronics offers new power monitoring instruments and packaging options that can connect to pole top sensors to provide fault indication, peak fault currents and full power system measurements. Packaging options include both standard and customized utility designs complete with power, communication and physical security features. A customized design for a US utility is shown in the figure below.

The Bitronics Pole Top Power Monitor, model **M661P3**, is designed to interface to Lindsey and other types of pole top sensors and provides support for distribution automation applications including Fault Circuit Indication, End of the Line Monitoring (EOL), Volt-VAR Optimization (VVO), Conservation Voltage Reduction (CVR) and Fault Location Isolation and Service Restoration (FLISR).

Settings can be easily entered through webpages; no PC software is required. Quick setup and commissioning is afforded through pre-set register/point sets and pre-packaging options in rugged user-specified enclosures. M661P3 features include:

- Peak fault current captured and made available as analog DNP3 points or Modbus registers
- Definite Time Overcurrent element for sensing presence of faults in sectionalizing schemes
- Full measurement set including volts, amps, watts, kWh, demands, and frequency
- High accuracy: .2% energy and .001Hz frequency
- Full communication support: DNP3 or Modbus over RS-232/485 serial or Ethernet
- Physical digital input for switch position or door opening alarm
- 12/24V dc output to power user-supplied radio modem or other accessory
- Options to interface to Lindsey sensors or to conventional CTs/PTs
- Option to purchase in NEMA enclosure

The Bitronics Pole Top Power Monitor, packaged and attached to Lindsey sensors, will be on display at our DistribuTECH 2018 booth #2135 in San Antonio.



The Pole Top Sensor Transducer can be mounted in a NEMA enclosure

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Upcoming Training & Events

Upcoming Scheduled Courses:

OrionLX/OrionLXm Automation Platform

January 24 - 25, 2018	Lenexa, KS	K700
March 7 - 8, 2018	Lenexa, KS	K700

For complete course descriptions, please visit our website <http://www.novatechweb.com/substation-automation/training/>

Tradeshows:

DistribuTECH 2018
January 23 - 25, 2018
San Antonio, Texas
Booth #2135

2018 IEEE PES T&D
April 16 - 19, 2018
Denver, Colorado
Booth #2958

Latest Software

OrionLX Release: 8.8

Orion NCD3 Version: 3.31

Bitronics M87x firmware: v4.16

Bitronics 70 Series Configurator: v4.16

Bitronics 50 Series Firmware: v3.15

Bitronics 60 Series Firmware: v2.24

Bitronics PowerPlex II Firmware: v2.24

BiView: v3.06

Orion Active-Standby Redundancy

NovaTech is adding a hot standby redundancy option for the OrionLX Automation Platform. Applications targeted for Orion Redundancy include larger, more complicated substation RTUs, substation HMI, Math & Logic, and Orion-based “WEBserver” SCADA. Key features:

- Communication to DNP3 SCADA is managed to minimize missed events and avoid duplicate events during switchover. OrionLX database synchronization makes this possible.
- TCP SCADA can poll to a single TCP at a single IP address. The “Active” OrionLX assumes an alias IP address to make this possible.
- Serial SCADA interacts with Active Orion until throwover is required to Standby. Event buffers are intelligently managed to avoid event floods.
- The following operator-initiated real-time actions are replicated bi-directionally (Active-to-Standby and Standby-to-Active):
 - Tags and Tag Log
 - Acknowledged Alarms
 - Blocked Points
- Operators can use either HMI for viewing status, placing tags, acknowledging alarms, blocking points, or executing controls.
- OrionLX Math & Logic schemes are simplified though database synchronization.
- All IEDs can be polled by both Active and Standby Orion. This ensures that the communication health of the Standby Orion is known prior to switchover.
- Communication health and other diagnostic data is continuously monitored between Standby and Active Orion.
- Throwover to the Standby OrionLX can be accomplished manually or automatically.
- A “Standalone” mode is offered for testing configurations and upgraded firmware.
- NCD, Math & Logic, and SVG webpage configurations and SVG pages loaded to Active Orion are automatically transferred to Standby Orion.
- A redundancy diagnostic and status webpage provides intuitive situational awareness.

Check out Orion Redundancy at our DistribuTECH 2018 booth #2135 in San Antonio.

Orion I/O Update

The Orion I/O features are summarized in a new video at <https://www.novatechweb.com/orionio>

Introducing Orion I/O

The Latest Member of the Industry-Leading Orion Substation Automation Family



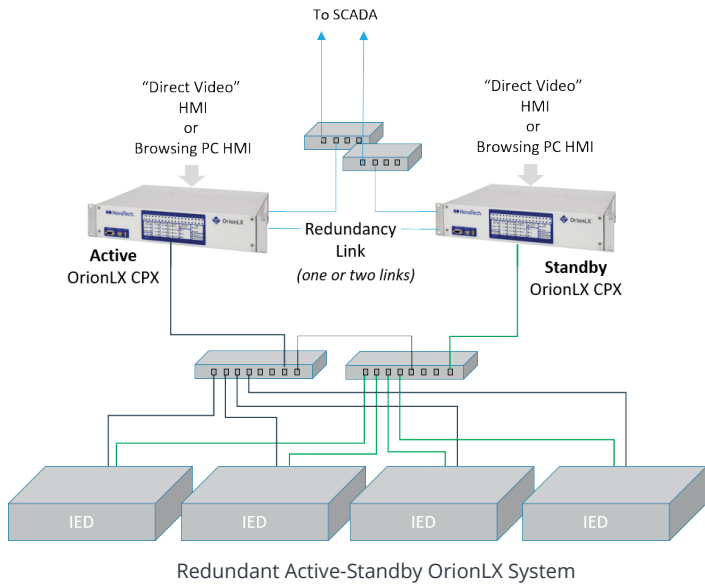
Video QR Code



Model Generator QR Code

A new Orion I/O Model Number Generator simplifies I/O Card and option selection.

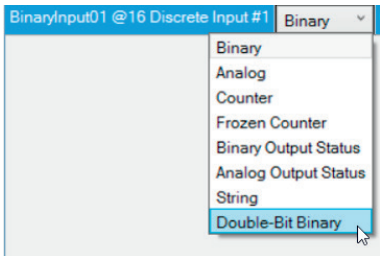
See it on our website at <https://builder.novatechweb.com/orionio>



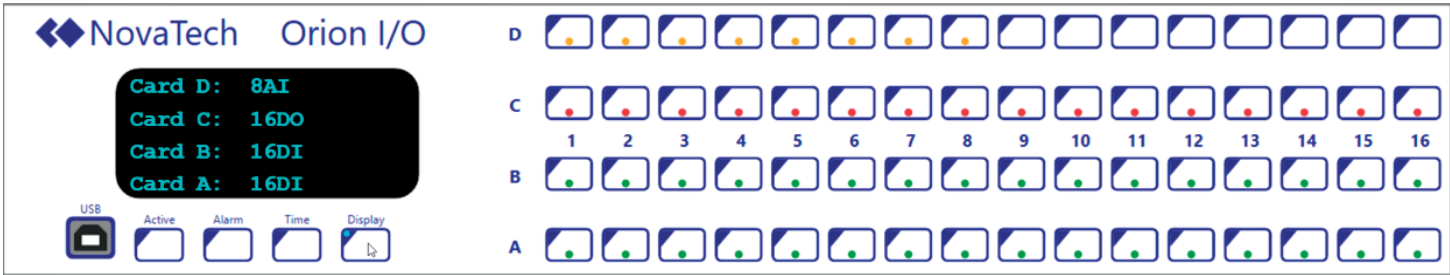
NCD v3.31

New features include:

- Added Passive/Silent install capability to NCD, Inkscape Extension, and USB Serial drivers.
- Updated Inkscape Extension to use Inkscape V0.92.2.
- Added Double-Bit Binary Inputs
- Support for new Orion I/O, including Advanced User Interface simulator
- SEL® Master, LogicPak, and WEBserver XML converted to tabular format



Double-Bit Binary support added



NCD v3.31 includes a simulator of the Orion I/O Advanced User Interface. All configured point names, states, and user-configurable messages can be reviewed prior to making active in Orion.

SEL Master Port 3 - SEL Master (Orion File 2)*

Port Options: Copy Port Move Port Delete Port Close Port

Port Poll Groups: SEL-751_Feeder23

Inputs - Default TagNames

Company: SEL Device Model: 751A R419 RELAY

Tag Name	Point Type	Group	SER Name	Min	Max	Command
Meter IA	Analog	Meter		0	32767	
Meter IB	Analog	Meter		0	32767	
Meter IC	Analog	Meter		0	32767	
Meter Curr Imbal	Analog	Meter		0	100	
Meter Line VAB	Analog	Meter		0	32767	
Meter Line VBC	Analog	Meter		0	32767	
Meter Line VCA	Analog	Meter		0	32767	
Meter Vltg Imbal	Analog	Meter		0	100	
Meter kW	Analog	Meter		-32768	32767	
Meter kVAR	Analog	Meter		-32768	32767	
Meter PF	Analog	Meter		-1	1	
Meter Freq	Analog	Meter		0	75	
FMD_RMB3A	Discrete	Fast Meter	RMB3A			
FMD_RMB2A	Discrete	Fast Meter	RMB2A			
FMD_RMB1A	Discrete	Fast Meter	RMB1A			
PassThru Status	Discrete	PassThru Status				
Event Summary String	Event Summary	Event				
History String	User Command	Event				"HIS 12"

Configured Inputs

Port: 3

Port Name: SEL Master

Device: SEL-751_Feeder23

Device Company: SEL

Device Model: 751A R419 RELAY

PointName: PassThru Status

PointType: Discrete

PollGroup: PassThru Status

New tabular format, shown above, simplifies point selection and edit for SEL Master protocol. New features include:

- Search bar locates points quickly
- Print report supported
- Edit common attributes simultaneously
- Point details available