

OrionLX Automation Platform Production Units Shipped

Following many months of research, development, testing, and a very successful beta test program involving current and prospective customers, NovaTech is pleased to announce the initial commercial shipment of the OrionLX Automation Platform.



OrionLX

The fourth generation in the NovaTech Orion Automation Platform product family, the OrionLX continues our tradition of market-leading innovation and ease-of-use. An updated version of NovaTech Communications Director (NCD) software has also been released to accommodate the prevailing trends in substation automation, distribution automation, and SCADA RTU applications.

New features of the OrionLX and updated NCD include:

- Comprehensive security suite to address evolving NERC CIP compliance requirements.
- The ability to integrate over 100 IEDs, including up to 96 Ethernet-connected IEDs, into a single secure substation gateway.
- Intuitive web-based GUI with the industry's best diagnostic tools.

- Point aliasing to allow viewing of diagnostic and Orion Webserver Alarm information in 'plain text' instead of default IED point names.
- Additional tools to configure applications across multiple Orions within a single offline configuration tool (NCD).

"It really looks like you folks have hit another home run."

Prior to commercial release, OrionLX and enhanced NCD have been beta tested by several existing and prospective customers in a lab environment to rave reviews. Comments from beta testers regarding their experience include the following:

"In general things are going very well with the new units. We have tested the DNP Slave port with [a] test set and found no issues. We have finally gotten

several...relays from our Relay group and hooked them up yesterday and everyone came up with no issues. This is a fantastic product and I can't wait to show it off to everyone."

"I have played with the OrionLX and really like it. It looks like you folks did an outstanding job, but of course, I would not have expected anything less. I like the security features, I like the interface, I like that you have kept it simple, yet much more powerful. I like the physical layout of the front of the unit as well as the well laid out hardware on the inside. It really looks like you folks have hit another home run."

OrionLX is currently available with most features previously available on Orion5 and Orion5r. Contact your NovaTech sales representative for inquiries.

Expanded Coverage for TechTalk

You may have noticed that this issue of *TechTalk* is a bit larger than the last. With all the growth in our Utility division, including the incorporation of the Bitronics line of Measurement IEDs and the continual expansion of our Orion development and support team,

we found we had more information to share than could fit on two pages.

As we continue to expand our product line and capabilities, we would greatly appreciate your feedback on the content you'd most like to see

presented in these pages. Kindly drop Technical Sales Manager Eric Schultz a email at erics@novatech-llc.com with your suggestions, and thank you for your continued interest in NovaTech products.

IEC 61850: Meeting Global Need with World Class Development Effort

NovaTech is pleased to announce the successful completion of IEC 61850 interoperability testing of the Bitronics 70 Series IEDs. The goal of IEC 61850, as was UCA, is to provide seamless operation in multi-vendor environments, faster and easier system integration and commissioning, and eliminate unnecessary wiring. The addition of SNTP is noteworthy. This synchronization protocol reduces the number of GPS clocks required in an installation by allowing timing signals to pass through routers.

Throughout the development, Bitronics product engineers worked closely with global distribution partner AREVA T&D to ensure interoperability in IEC 61850-based AREVA substation automation systems.

The design, development, integration and testing process was a global process from start to finish. Bitronics engineers first travelled to Europe to work with AREVA T&D engineers experienced in developing and integrating other AREVA IEC 61850 products. AREVA is one of three suppliers with global expertise in developing and applying IEC 61850.



Beta testing facility in São Paulo, Brazil



Bitronics engineers collaborated with U.S.-based partners SISCO and ENERNEX. Polish software developer, Transition Technologies, and AREVA T&D UK provided the configuration tools.

Managing these globally-sourced assets required weekly testing for early error correction by substation automation integrators in São Paulo, Brazil and Noida, India, who conducted tests on the beta code 70 Series IEDs. The first implementation of the code was confirmed stable and compliant in July 2008. IEC 61850 is scheduled for release on Bitronics 70 Series IEDs to U.S. customers in 2009.

“What 61850 brings to substations, for the first time really, is a set of tools designed from the ground up to work in a network environment. Today everyone has experience with the internet and office IT systems so they have a standard of expectation for interfacing networked devices.”

Bryan Gehringer
Product Application Manager

The 70 Series IEDs consist of the expandable M87x modular family and the economical M57x compact family. Detached panel displays are optional.



“Although we already had a stable implementation of UCA 2.0 in our 70 Series products, the IEC 61850 effort was an order of magnitude more complicated to implement. We chose to devote our entire engineering team to test out each and every component of the protocol; from data modeling to file transfer and everything in between.”

Gary M. Nelson
Principal Software Engineer

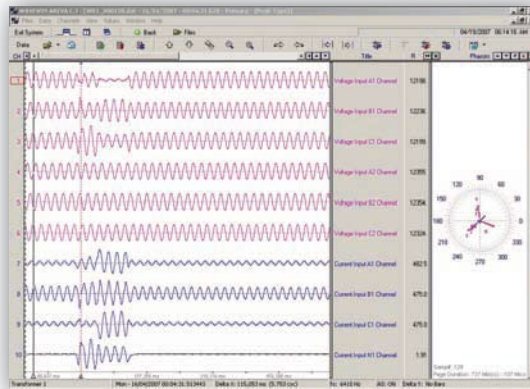
“The large scope of this development required extending the project team to include vendors and contractors. This partitioning allowed Bitronics to focus on its core capabilities while working alongside industry experts to expand in-house knowledge and forge strong relationships for future endeavors.”

Andre Wagner
R&D Manager

New Support Website for Wavewin® Bitronics

The distributed event recording capabilities of the Bitronics 70 Series IEDs are best realized with advanced event visualization tools. NovaTech is proud to partner with Philadelphia-based SoftStuf to bring you the Wavewin Bitronics software and its recently launched support website.

Wavewin allows engineers to visualize substation events by merging and appending Comtrade files obtained from multiple event-recording substation IEDs, including the Bitronics 70 Series. Wavewin Bitronics Pro contains additional functionality to evaluate event files and provide fault characteristics for the monitored line.



The Wavewin Bitronics Event Viewer and Support Website



Another application program from Bitronics (WinDR) can scan all 70 Series IEDs on an electrical network, determine the relative association of these event files between IEDs, and automatically merge these file into a composite or "virtual recording" file for Wavewin.

Wavewin can be then be used to analyze the composite file as if one IED made the recording.

You can evaluate, purchase, and upgrade your Wavewin Bitronics online at <http://www.wavewinbitronics.com>

Product Updates for Orion5r, Orion NCD and Orion Distributed Discrete I/O (DDIO)

Orion Enhancements

DNP Master and Slave over Ethernet drivers now support UDP as well as TCP.

Support for new SEL® relay models:

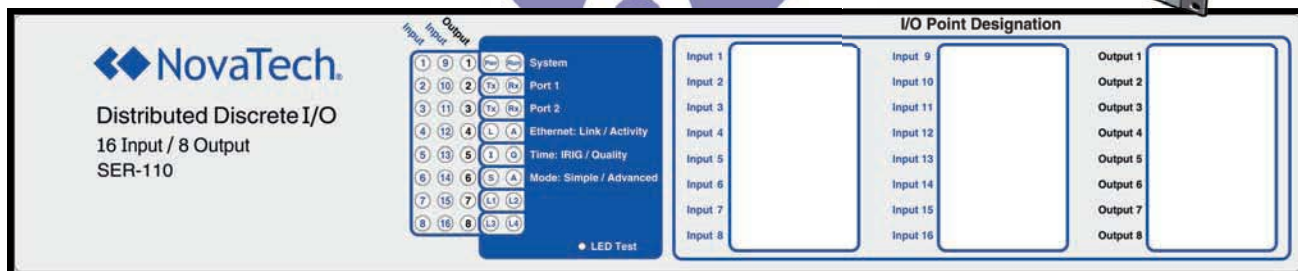
- SEL-2431 voltage regulator control
- SEL-751A feeder protection relay
- SEL-2414 transformer monitor
- SEL-787 transformer protection relay

Orion NCD 2.0 Released

Latest release includes support for OrionLX and advanced feature configuration support.

New Orion DDIO Front Overlay

Allows for custom application point labels.





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Visit us at DistribuTECH - Booth 2022

See you in San Diego with the latest developments of the Orion and Bitronics product families. Learn more about distributed event recording and other solutions unique to NovaTech.



Orion &
 Bitronics

Easy to Use,
 Hard to Beat.

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UPCOMING EVENTS

February 3-5, 2009: DistribuTECH, San Diego, CA
 Please visit us in Booth 2022

February 13-16, 2009: TechAdvantage, New Orleans, LA
 Join us in New Orleans at Booth 1225

March 15-18, 2009: IEEE PES Power Systems Conference, Seattle, WA

April 6-9, 2009: Western Power Delivery Conference, Spokane, WA

EMPLOYEE NEWS

Ed Fleming joined NovaTech as a Software Design Engineer in our Lenexa, KS office. Ed has a Computer Science degree from Johnson County Community College and an MBA from University of Kansas. He was previously employed at Garmin International in their portable GPS navigation division. Ed's knowledge of .NET technology will be utilized for our configuration software and other user interface projects.



LATEST SOFTWARE

Orion Firmware Version: 1.39.1 (for 5 and 5r) / 1.39.3 (for LX)

NCD Version*: 1.77 (for 5 and 5r) / 2.01 (for LX)

70 Series Firmware: 2.18

BiView: 2.29

(*Common NCD will support all Orion products by 6/09)