

Corporate Communications 11425 Cronhill Drive Owings Mills, MD 21117





New Bitronics PowerPlex II Discrete I/O and Serial Port

New PowerPlex II automation applications are now supported with the addition of I/O and serial communications. These applications include monitoring of breaker position, monitoring of apparatus alarms, monitoring of rack-in/rack-out status of switchgear breakers, and remote breaker TRIP/CLOSE. Specifications for new I/O below:

Topology

Eight (8) discrete inputs

Four (4) discrete inputs/four (4) discrete outputs

Inputs

- High speed, suitable for 1ms SOE
- Nominal Input Range: 24V dc to 250V dc
- Threshold Voltage: 15V dc +/-1V (at 25C)
- Input Resistance: 33kohm
- Input De-bounce Time: Selectable, from 1ms to 2s

Isolation

- I/O Terminals to Case: 2000Vac. 1min
- I/O Channel to Channel: 2000Vac, 1min (channel 4 to other channels)

Outputs

- Tripping duty relay
- Resistive: 30A
- Continuous Carry: 5A
- Break Inductive @48V dc: 700mA
- Break Inductive @125V dc: 200mA
- Output Operate Time (time from command by Host, does not include protocol delays)
 - Assert (Close time with "N.O." jumper): 8ms
 - Release (Open time with "N.O." jumper): 3ms



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Upcoming Training & Events

Upcoming Scheduled Courses:

OrionLX/OrionLXm Automation Platform

October 4 - 5, 2016	Lenexa, KS	K700
December 5 - 7, 2016	Lenexa, KS	K700
March 7 - 8, 2017	Lenexa, KS	K700

For complete course descriptions, please visit our website http://www.novatechweb.com/substationautomation/training/

September 19-21

Energy Association Electric Operations Conf. Pittsburgh Airport Marriott

August 30 - September 1

PAC World Americas Conference Raleigh, North Carolina

Latest Software

OrionLX Release: 8.8

Orion NCD3 Version: 3.30

Bitronics M87x firmware: v4.11

Bitronics 70 Series Configurator: v4.11

Bitronics 50 Series Firmware: v3.12

Bitronics 60 Series Firmware: v2.12

Bitronics PowerPlex II Firmware: v2.12

BiView: v3.05

Come see Bruce Muschlitz present "IEC 61850-- More Than Just a Protocol" at PAC World Americas in Raleigh, NC

For more on the conference, please visit http://conference-americas.pacw.org



All Bitronics M570 applications can migrate to the PowerPlex II or the M870 Series

An optional RS-232/RS-485 serial port is also available on the PowerPlex II. In addition to providing a connection to the substation RTU, this port can also drive one or more D650 displays.

The PowerPlex II is now an excellent migration solution for M571 customers who require measurement, monitoring and display, but not fault recording. The PowerPlex II with the serial port and I/O options utilizes the M571 standard chassis and provides the option for DNP3, Modbus, or IEC 61850 protocols that were available in the M571. For recording applications, the M871 provides the same configuration tools and triggering/recording functions with the same footprint as the M571.

Recently, a customized OrionLX training course was conducted in Lenexa, KS for Meralco, the largest distribution utility in the Philippines, and our channel partner, NTA Energy Solutions.

Training participants and local management pictured left to right are:

Allan A. Alagao, Office, Sub Transmission Services, Meralco Serafin C. Ramos, Relay Engineer, Meralco Paulo Reyes, VP of NTA Energy Solutions, NovaTech Channel Partner Berno Matthaeus, International Sales, Manager BJ Weil, Director of Lenexa Operations of NovaTech Matt Trubilla, Staff Application Engineer and Instructor Buz Zey, President of NovaTech

NovaTech Utility Training Update

NovaTech offers customized onsite courses and scheduled courses at our Lenexa, KS facility. Courses can be for Orion and Bitronics products as well as applications and technologies. The tables below show available courses and recently updated courses are highlighted in red:



NovaTech Channel Partner Paulo Reyes is raising NovaTech sales in the Philippines.

Utility Application Operation Courses	Duration	Required Prerequisite Course or Experience
Orion DA-Master Design, Operation and Maintenance (Full Course)	1 day	Orion Full Course, or equivalent experience.
Orion DA-Master Design, Operation and Maintenance (Short Course)	4 hours	Orion Full Course, or equivalent experience.
Orion WEBserver/SVG Graphics and Design Application	1 day	Orion Full Course, or equivalent experience.
Orion Math and Logic (.bas) Design and Application (plus LogicPak)	1 day	Orion Full Course, or equivalent experience.
Orion Advanced Math and Logic (.lua) Design and Application (plus LogicPak)	1 day	Orion Full Course, or equivalent experience.
Orion Protocols for SEL® Relay Integration Design and Application	6 hours	Orion Full Course, or equivalent experience.
Orion IEC 61131-3 Math and Logic Design and Applica- tion	2 days	Orion Full Course, or equivalent experience.
OrionLX / LXm Cyber Security Design and Application	2 days	OrionLX / LXm Full Course, or equivalent experience.
OrionLX / LXm Alarm-Archive-Retentive Configuration and Application (AAR)	4 hours	OrionLX / LXm Full Course, or equivalent experience.
OrionLX / LXm Email Configuration and Application	4 hours	OrionLX / LXm Full Course, or equivalent experience.
Bitronics M870 - Meeting Latest PRC-002 Requirements	1 day	Bitronics M870 Series Distributed Recorder Course

Utility Product Courses	Duration	Required Prerequisite Course or Experience
OrionLX / LXm Automation Platform (Full Course)	1 1/2 days	None
OrionLX / LXm (Short Course)	4 hours	Orion5/Orion5r Full Course or equivalent experience.
Distributed Discrete I/O (DDIO) and Combination I/O (DCIO) Module	4 hours	None
Bitronics 878 High Density I/O	1 day	None
Bitronics M870 Series Distributed Recorder	1 1/2 days	Understanding of 3-phase power and fault recording basics

Utility Technology Courses	Duration	Required Prerequisite Course or Experience
DNP3.0 Protocol and Application including Serial and Ethernet Communication Basics	1 1/2 days	None
Ethernet for the Utility Professional	1 day	None

IEC 61850 Server Support for the OrionLX



With the addition of 61850 Server support, the OrionLX can now provide a complete 61850 solution with Client, Server and GOOSE subscribe/publish. The OrionLX can also support applications with both 61850 and legacy automation, as diagrammed above. This means that data from 61850 IEDs can be routed to non-61850 HMIs and SCADA, and vice versa.

For Server applications, a new "Model Builder" feature in NCD enables fast creation of user-specified Server Device models. Logical Devices can be set up any way the user desires. An "IED Device" approach and "Substation Apparatus" approach are diagrammed above. Each Logical Device is populated by one or more Logical Nodes (measurement, protection, control, etc), then Data Objects and Data Attributes. Any point in the Orion real-time database can be dragged and dropped into these Logical Devices. The 61850 user can define Logical Devices based on IEDs, substation apparatus, or any other way that best supports practices.

