

2 64-bay busbar protection with IEC 61850

Toshiba GRB100 busbar protection is now available for applications with up to 64 feeders. In addition the upgrade includes IEC 61850 compliant communication. Toshiba launched their first numerical busbar protection in 1986 and GRB100 provides proven features alongside advanced protection algorithms. GRB100 offers discriminating and check zone protection with percentage restraint characteristics and features sub-cycle operation, CT saturation countermeasure and an optional supervisory element. It has a proven track record in Europe, Asia and

Middle East and has been applied at all voltage levels. The design philosophy emphasises reliability to enhance the security and dependability vital to the integrity and stability of power systems.



3 ABB introduces

New motor and transformer protection

ABB introduces two new 615 series protection and control IEDs, REM615 and RET615. Re-engineered from the ground up, the 615 series unleash the full potential of the IEC 61850 substation communication standard.

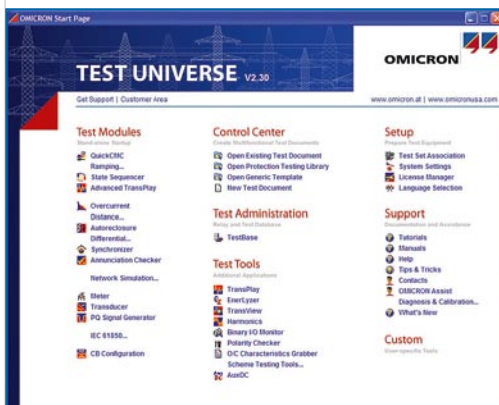
The 615 series consists of protection and control IEDs designed for the protection, control, measurement and supervision of network equipment in utility and industry power distribution networks. The IEDs



are characterized by their compactness and withdrawable design and are part of ABB's Relion® product family. REM615 constitutes main protection for asynchronous motors and their drives in

manufacturing and process industry. RET615 is the ultimate differential protection and control IED for two-winding power transformers and power generator-transformer blocks.

4 Advanced Testing Tools - Version 2.30



OMICRON electronics announces the release of Version 2.30 of the Test Universe testing software suite. Some key features of this release are:

- IEC 61850: up to 360 additional GOOSE input and 360 additional GOOSE output data points as virtual inputs / outputs
 - NetSim: Impedance View, individual CT simulation for multiple measurement locations, improved CT measurement import for 'virtual primary testing' with real on-site CT and burden data, new test cases for series-compensated line etc.
 - PermaSync: Analog and Sampled Values outputs continuously stay in sync with each other and to an external (IRIG-B) time base (e.g. for PMU and long-duration end-to-end testing)
 - Ramping and Pulse Ramping of impedances (incl. Impedance View), fault loops, symmetrical components, power; with Vector View
- This release is a free download for all users with V.2.x licenses.



5 GE's MultiLink Family of Hardened Ethernet Switches

The MultiLink ML1200 & ML800 are the newest additions to the MultiLink series of industrially hardened Ethernet Switches. They are designed with configuration flexibility, full network management and network security features. The ML1200 & ML800 have the necessary features to fit your

mission-critical, substation, industrial or transportation application.

GE's MultiLink Family of Hardened Ethernet Switches are:

- Compact
- Rugged
- Reliable



6 Interconnection Protection Relays MICOM P341

The MiCOM P341 provides Dynamic Line Rating (DLR) protection which is a cost effective solution that can be applied for load management and protection of overhead lines enabling a larger penetration Distributed Generation (DG) such as windfarms. MiCOM 341 offers flexible communications options with a number of protocols and communications ports available including IEC 61850.

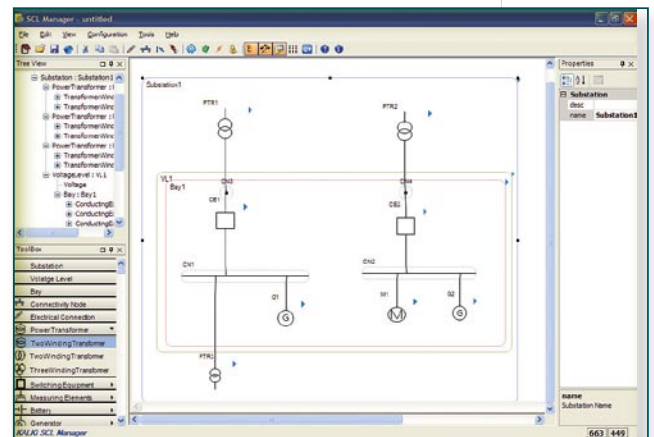
MiCOM P341 also provides overcurrent and ground fault, voltage and frequency protection, thermal overload, negative sequence overcurrent and overvoltage

and power protection for the generator. In addition, rate of change of frequency and voltage vector shift protections are provided for loss of mains.

7 IEC 61850 SCL Manager the new v4.0. release of SCL

Kalkitech announces the much awaited v4.0.0 release of its SCL Manager product, the inter-operable IEC 61850 Engineering Tool for utilities, OEMs, System Integrators and Consultants. This version comes with advanced features and scalable engineering options supporting IEC 61850 substation automation engineering and configuration using the IEC 61850 Substation

Configuration Language. The following enhanced features that add to the functionality of the SCL Manager: Projects and Workspace concept for bundling information together, document generator for engineering activities, IED database with ICD files and related details of the IED and many others. SCL Manager automatically calculates the position of each element and draws the SLD from the SSD file.

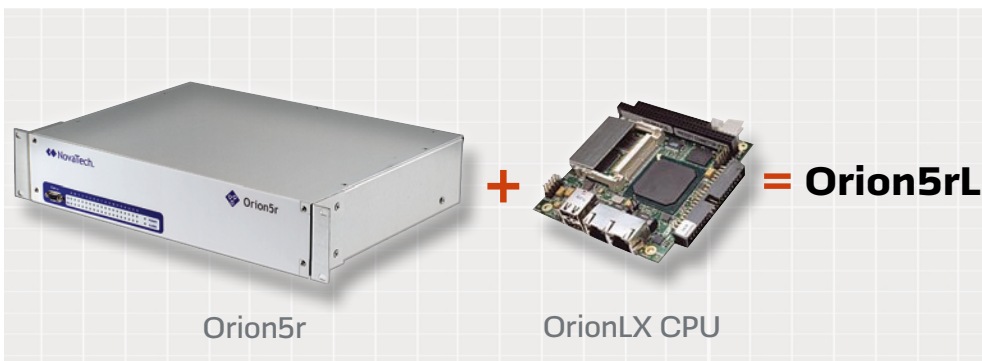


8 OPC Server and Data Gateway with expanded functionality

The Orion5rL is an Orion5r with CPU of the OrionLX, allowing the Orion5rL to take on larger applications requiring more connections, points and security.

Orion5rL capacities are the same as the OrionLX: up to 96 Ethernet connections, up to 20,000 points and support for the new "Cascaded Orions" option (multiple Orions working together as one system).

The Orion5rL security features are also the



same as the OrionLX: strong passwords, user groups, firewall, key management, encryption and logging.

Software options from the OrionLX are available on the Orion5rL: Web-based online operations, email alarms and SEL(R) event

records, SQL database and expanded memories. With minor editing current Orion5r configurations will run on Orion5rL.

9 IEEE PES Outstanding Young Engineer Award

Zhenyu (Henry) Huang received the Outstanding Young Engineer Award for "outstanding contributions in the leadership of technical society activities, leadership in community and humanitarian activities, and evidence of technical competence".

The award was presented to him by Wanda Reder, President of the IEEE Power and Energy Society during the Awards Luncheon at the IEEE PES General Meeting in Calgary, Alberta, Canada.

Dr. Huang is currently a Senior Research Engineer with the Energy and Environment Directorate at the Pacific Northwest National Laboratory (PNNL), Richland, Washington, USA. His major projects include high performance computing applications to power systems, phasor applications in model validation and modal analysis, advanced load modeling, and disturbance analysis.

