



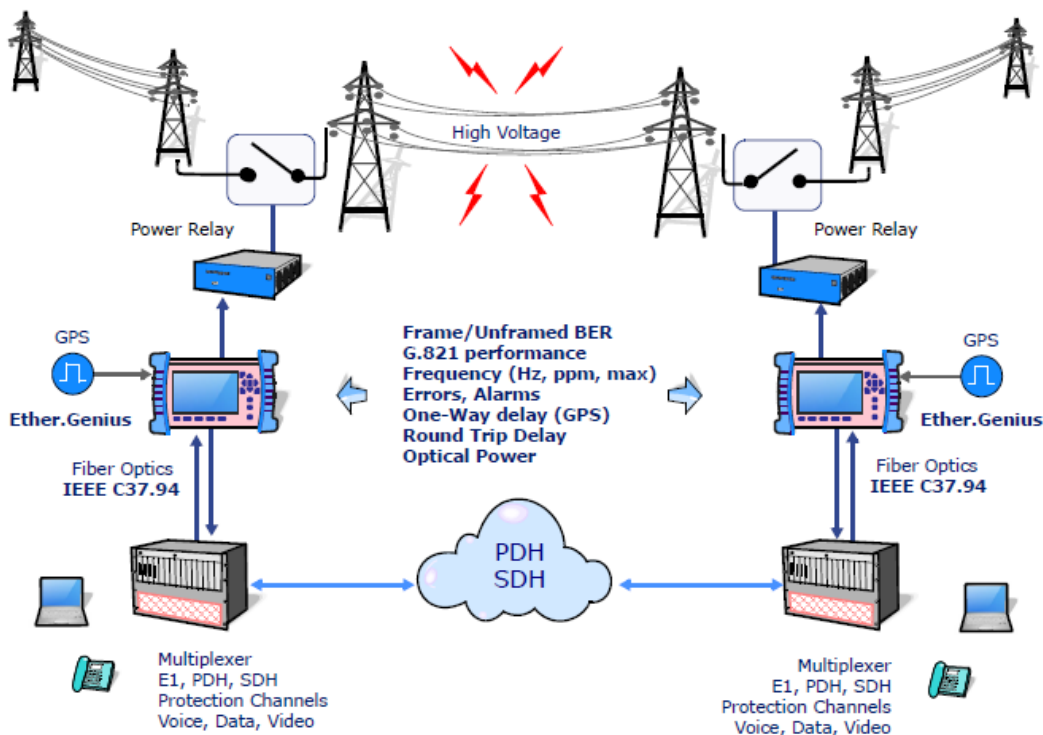
S U C C E S S S T O R Y

To: Distributors and Customers
From: Marketing and Communications
Subject: ALBEDO won C37.94 tenders in Australia

Date: July 2015
Answer to:
zib@albedo.biz

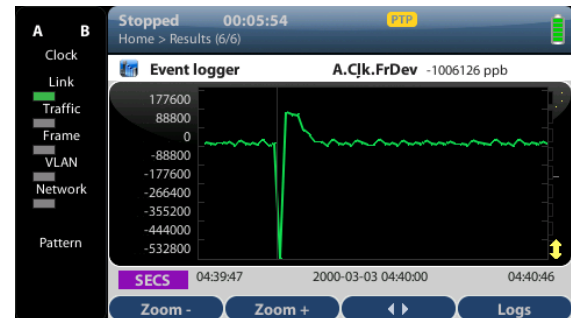
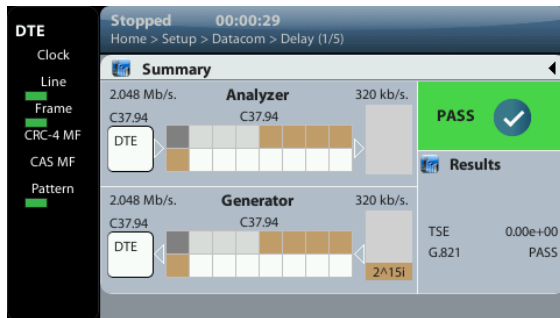
ALBEDO telecom, one of the most innovating manufacturers of telecom solutions announces that the Ether.Genius is the product that has been selected by Australian Power Utilities to install and maintain the generation substations thanks to the unmatched features of Ether.Genius that includes in one device multiples features including C37.94 and one-way delay.

Tele-protection schemes enable substations to communicate each other to exchange of critical data in order to assure correct operation. In order to warranty the operation the telecom network should always be in perfect conditions in terms of availability, performance. Fran Hens explains that initially the telecom protection network was also electric but the power environment is characterized by a high level of electromagnetic fields that causes interferences in the communications line. This is why the industry moved to optical fibers to connect the different items of the installed in the substations.



Fiber optics do not need ground and are immune to the interferences caused by electrical noise therefore eliminates a lot of the errors that electrical connections do suffer. In other words, it is convenient the use of fully optical links from power relays to Multiplexers as the IEEE C37.94 standard defines.

On the other hand it is of key important to know the asymmetry of the delays. Because do exists devices that protect the power network that are connected at both ends of a power line. These devices are reading continuously the voltage, the current and the phase at each this is why the do need a very accurate synchronization (i.e. PTP with power profile) in order to compare each sample with its equivalent. If a line fails (cause by a discharge to ground or jump between phases) and the parameters at both extremes are not comparable then the protection disconnects the power flow to avoid shortcuts and overcharges. Imagine that there is no jump between power phases but an asymmetric delay of the telecommunications line, this would be a false alarm but the protection mechanism would also disconnecting the power line to protect the infrastructure. This is the reason why is so important to measure accurately the one-way-delay: to assure that the phase impairments are true not a telecommunications problem.



ALBEDO Ether.Genius is a multi-technology tester equipped with all the features you need to install or maintain telecom networks based on Gigabit Ethernet (GbE), Synchronous Ethernet (SyncE), E1, Datacom, Precision Time Protocol (PTP IEEE 1588), Jitter/Wander, C37.94 and One-way-delay test.

About us. ALBEDO Telecom is an International manufacturer of telecom synchronization nodes, testers and networking devices. We help R&D laboratories, Mobile and Telecom operators to install optical and electrical infrastructures that support any kind of applications based on voice, video and data. ALBEDO's core expertise range from LTE, 3G, PTP, SyncE, GbE, 10GbE, E1/T1, Jitter/Wander, Cabling measurements, QoS and SLA technologies implemented in WAN emulators, Taps, Testers, Clocks and Systems. ALBEDO also offers consultancy and training services. ALBEDO has direct operations and representatives in more than 82 countries all over the world.

ALBEDO Telecom – Discover the seven reason why we continue manufacturing in our headquarters.