PRESS RELEASE

novotronik develops switch matrix for 40GBase-T tests

High bandwidth of novotronik's GTS3698 switch matrix promises a secure investment

novotronik, the manufacturer of switching, measuring and distribution devices in the high-frequency and audio/video signal transmission range, has developed the model GTS3698 switch matrix, which can perform 40GBase-T cable tests when used in conjunction with a spectrum analyzer. With a 20 GHz bandwidth the switch matrix comes ready-equipped to handle future requirements.

Mertingen, May 1, 2017 - The novotronik GTS3698 switch matrix accelerates and automates test procedures for measuring category 8 twisted pair cables that require 40GBase-T networks. novotronik has designed the switch matrix as a 19-inch device with four ports to connect up an analyzer and 16 ports for connecting eight wire pairs. The measurements can be performed without a balun. "When we were developing the GTS3698 switch matrix we put a lot of emphasis on selecting and matching the right components to guarantee the specifications," explains Michael Grimminger, CEO of novotronik. "For instance, optimum channel separation in the 18 GHz frequency range requires a great deal of expertise, in particular to achieve out-out isolation at more than 100 dB."

The connector and data cables need to be connected just once to the switch matrix and spectrum analyzer, and then all measurements can be performed as per the specifications of the ANSI/TIA-568-C.2-1 (CAT.8) standard and others. There is no need to change cables over at any point during the test run as the switch matrix automatically sets the proper configuration for the particular test. The measurement series can be run in sequence or run individually by mouse click.

The duration of the test is significantly shortened compared to the conventional method , the error rate drops considerably and there is less wear-and-tear on the sensitive plug connections. Users can control the switch matrix via a web interface running any web browser. Up to 50 freely programmable switch states can be stored and accessed as required.

The high bandwidth of the novotronik switch matrix ensures measurements up to 20 GHz, allowing for TDR and EMV measurements to be carried out in addition to standard measurements, such as insert loss, return loss, near-end crosstalk, far-end crosstalk, power sum, ACRF, PSACRF, propagation delay and propagation delay skew. Moreover, the 20 GHz bandwidth of the device guarantees that the switch matrix is equipped for future developments in the cable industry.

The novotronik GTS3698 switch matrix is already being used by GHMT AG, the German high frequency measurement technology specialists, to test and evaluate category 8.1 and 8.2 data cables, category 8.2 connectors and also Class I and II transmission lines (channels) for 40GBit applications.

About novotronik:

novotronik is an innovative manufacturer of high quality switching units, measurement tools and matrices in the high frequency and audio/video signal transmission area. The service portfolio comprises the development, production and implementation of hardware and software based components, modules, devices and systems for signal processing. novotronik is successful on the international stage and has customers in telecommunication industry, aerospace and aeronautics, radio and TV industry as well as in industrial manufacturing. The company, founded in 1994, is located in Mertingen, Germany. Further information: www.novotronik.com

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