Press Release



u²t Photonics Unveils the World's Fastest Balanced Photodetector with 70 GHz 3dB Bandwidth

Berlin, Germany, May 21, 2013 – u^2t Photonics AG, the provider of leading-edge optoelectronic components, today announced the world's fastest balanced photodetector offering a 3dB bandwidth of 70 GHz. The device supports systems for next generation networks using 400 Gbit/s or 1 Tbit/s coherent detection-based optical transmission.

The BPDV3120R complements u²t's product portfolio of ultra high speed photodetectors and receivers. The optical frontend consisting of a monolithic balanced photodetector chip with on-chip biasing has been successfully tested in a system environment and will be used in Test & Measurement (T&M) equipment, such as optical modulation analyzers, for the test of next generation coherent network components and modules.

The coaxial single-ended output can detect up to 64 GBaud polarization diversity x-QAM signals featuring highly reliable results for common mode rejection ratio, linearity and optical input power. Therefore, the device can be used in next generation long haul transmission systems at data rates of 400 Gbit/s and beyond. At the same time, the BPDV3120R is perfectly suited for T&M applications as well as ongoing R&D activities at high Baud rates.

"While 100G coherent systems are being widely deployed today, we can already see that 400 Gbit/s or even 1 Tbit/s systems will be required in a few years to support the continued exponential growth of data traffic in mobile and fixed networks," said u²t Photonics CEO Andreas Umbach. "Our 70 GHz balanced photodetector provides one of the key building blocks that will enable systems providers to build and deploy systems operating at 400G per wavelength or higher."

u²t started sampling the BPDV3120R in March 2013 and will start its production in June.

u²t Photonics AG, a privately-held company headquartered in Berlin, Germany, is a leading supplier of innovative optical components up to 100 GHz. On the basis of its unique and mature technology, u²t develops, manufactures and markets highly competitive products for high-speed communication applications as well as detectors with superior performance for T&M equipment vendors. Being ISO 9001 certified and providing high quality service, u²t offers a comprehensive and fully TELCORDIA qualified portfolio.

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