



Press release

3S PHOTONICS Showcases a Prototype of Next-Generation Directly Modulated 1550nm Analog Laser Module at ECOC 2009

1915 LMA: a Key Component for Next-Generation Broadband Optical Access Networks

Using OFDM modulation format, 3S PHOTONICS' new 1915 LMA Series analog DFB laser modules could contribute, in a near future, to the deployment of cost-effective, ultra-high capacity broadband optical access networks. A prototype is currently being showcased at the ECOC 2009 exhibition, on booth #117.

Nozay, September 21, 2009 – 3S PHOTONICS, world-leading French manufacturer of optical and optoelectronic components for telecommunications networks, today introduced its 1915 LMA Series of Next-Generation directly modulated 1550nm high bandwidth analog laser modules optimized for OFDM / QAM¹ modulation formats.

Specifically developed by 3S PHOTONICS for the EPOD² telecom project, sponsored by the French National Research Agency - ANR -, this low RIN 10mW 1550nm analog laser module enables the transmission of analog signals within an ultra-wide bandwidth from 10MHz to 20GHz.

This module is intended for the distribution and/or the transmission of radio-type signals thru broadband fiber links such as Radio-over-Fiber (RoF), RF over Glass (RFoG) or Fiber-to-the-Antenna (FTTA) applications.

"When directly modulated with OFDM technique – the one implemented in xDSL transmission -, the 1915 LMA represents a perfect transmitter candidate for the Next-Generation of broadband optical access networks, meeting all the stringent requirements set by the convergence of metro and access, i.e. low cost, mature technology, high bit rate and extended reach", claims Yannick Bailly, VP Marketing and Product Management at 3S PHOTONICS.

"We have developed this 1915 LMA prototype under the EPOD project. Purpose was to try to imagine what the Next-Generation access networks could or should be to overcome the expected bandwidth bottleneck due to the emergence of new Internet services. With our partners within EPOD, we have explored the transmission performances of our 1915 LMA analog laser modules through the use of OFDM modulation format. Objective being to take part to the evolution of access networks providing low-cost high performance optoelectronic technologies. 1915 LMA development is a key step forward for this project", explains Didier Sauvage, member of the board and CTO of 3S PHOTONICS.

1915 LMA laser module will be showcased at ECOC 2009 on 3S PHOTONICS Booth # 117.

¹ OFDM : Orthogonal Frequency Division Multiplexing / QAM : Quadrature amplitude modulation

² EPOD - Enhanced PON using OFDM modulation format – is primarily dedicated to access (FTTH) and metropolitan telecom markets, urban connections from 200 to 300 km. Orange Labs, the R&D division of the French telecom provider leads the EPOD project that also gathers French manufacturer 3S PHOTONICS and academic partners as LISIF (Laboratories of Electronics and Electromagnetism – L2E of Paris region) and a XLIM research team from University of Limoges / CNRS. Planned for 24 months, EPOD started early February 2009.

1915 LMA High Bandwidth Analog Laser Module' performances will be presented by Orange Labs, during a technical conference at ECOC (September the 23rd, 12h15, Room G, Group : 7.5: High Bit Rate PON).

For additional information about the conference:

<http://conference.vde.com/ecoc-2009/programs/technicalprogram/pages/schedulewednesdaysep23.aspx#7.4>

Product Highlights include:

- Powered by in-house 1550nm high bandwidth analog DFB laser chip, optimized for direct modulation
- Industry-standard butterfly package with GPO connector as RF input
- Very low RIN <-160dB/Hz for frequencies up to 18GHz
- High ex-fiber optical output power >10mW
- Wide bandwidth > 10GHz, enabling high bit rate transmission via direct modulation thru high spectral efficiency modulation formats, such as OFDM or QAM
- > 20km transmission over singlemode fiber

Product Status:

- R&D prototypes
- Product is currently being tested within ALPHA European project (www.ict-alpha.eu)



About 3S PHOTONICS

3S PHOTONICS – formerly Alcatel Optronics – is the leading world manufacturer of laser chips, optical discrete modules and components for telecommunication networks. It designs, develops, manufactures and commercializes active components powered by in-house III-V optoelectronic chips based on both Gallium Arsenide (GaAs) and Indium Phosphide (InP) technologies and passive components using Fiber Bragg Gratings (FBG).

The 3S PHOTONICS renowned optoelectronic chip manufacturing plant of Nozay is a technological feat that is unique in the world as it brings together GaAs and InP technologies under the same roof.

Its product portfolio includes five product lines:

- * Transmission Laser and Detector Modules
- * Pump Laser Modules for terrestrial and submarine applications
- * Chromatic Dispersion Compensation Modules
- * Filters, gain equalizers and pump stabilizers based on Fiber Bragg Gratings for terrestrial and submarine applications
- * Chips (lasers and detectors) and Front End Services

With over 14 years of experience, the company takes advantage of its expertise and know-how to also address new markets, providing smart solutions for defense, industrial and medical applications.

Based in Nozay (Essonne near Paris), 3S PHOTONICS is run by Alexandre Krivine and Didier Sauvage. The company employs over 160 people, of which 130 are experts in the photonics industry.

www.3Sphotonics.com

Press Relation

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