



Luceo's booth at the CIOE exhibition in Shenzhen, China

## New modules unveiled at CIOE

The CIOE exhibition in ShenZhen, China, was held in September this year, and was attended by a surprising number of people given the current economic uncertainties. Luceo took a large booth at the show, and considerable interest was apparent for the new OPM (Optical Power Meter) and BERT (Bit Error Rate Test) modules.

We were kept busy by constant requests for demonstrations, since it is now possible to have all the hardware required for multi-channel 10G testing in one mainframe. With very competitive pricing, this is an ideal test solution for manufacturers of 5G or 10G parallel products such as XFP transceivers or active optical cables (AOC).



The new EBERT-5 is a Bit Error Rate Test module (PPG+ED) that plugs into the *XBERT* and *ParallelX™* Chassis. EBERT-5 can generate and receive electrical data from 8.0 Gb/s up to 11.3 Gb/s. Optionally it can also operate from 4.0 Gb/s up to 5.7 Gb/s (half-rate mode). EBERT-5 offers user programmable PRBS patterns, as well as variable output amplitude and crossover adjustment.

OPM-1 is an Optical Power Meter module with a wide dynamic range of +10 to -70dBm over a wavelength range of 800nm to 1700nm. A universal interchangeable optical receptacle allows for mating with popular connector styles.

### Community site

Would you like to get further information about our products, application notes, and information on the latest technology?

Then join the Luceo Community by visiting our web-site at [www.luceotec.com](http://www.luceotec.com) and registering.



## Greetings

And welcome to the latest edition of the Luceo newsletter. We hope that you will find the content useful and informative, not only about Luceo products, but also about technology issues.

We have just returned from two major exhibitions in September. These were ECOC in Vienna, and CIOE in ShenZhen, China, where we launched our new optical power meter and BERT (Bit Error Rate Test) modules for the *XBERT* and *ParallelX™* platforms to the Asian market.

In this edition we show how the new modules can be used to implement a complete 10G parallel test solution in one mainframe.



With applications such as AOC (Active Optical Cable) continuing to expand, this equipment offers multi-channel 10G BER testing at an affordable price.

As well as these new modules, we are all working hard to introduce further products over the coming months.

Enjoy!

Rod Martin-Sales Director EMEA/AP

Kent Lopez- Sales Director Americas

In addition, there will be special offers available only to registered members such as discounts, and the chance to book private discussions with our engineers. Sign up today!

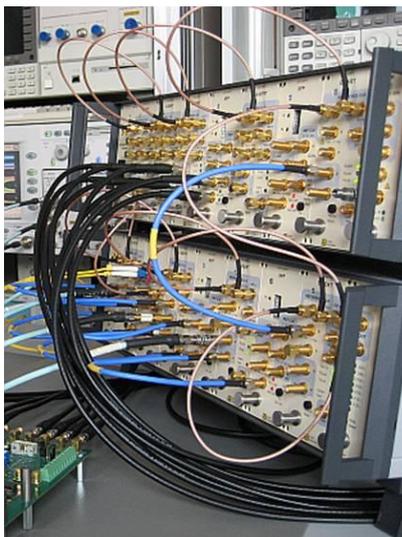
<http://www.luceotec.com/community>

## Cost effective 10G Parallel Testing

The founding members of Luceo were involved in development of fiber-optic transceivers for many years, and were fully aware of the need for a cost effective production test solution.

However, with the rise in the number of applications for multi channel testing at 10G such as active optical cables, the issue of cost-effectiveness is becoming ever more critical.

With the Paralex™ mainframe and EBERT-3 or -5 BERT modules, users can now configure up to 7 independent or correlated 5G or 10G channels in one mainframe.



**5G/10G parallel test solution**

**Suitable for AOC, QSFP, CXP,  
40GBase-, 100GBase- applications**

Additionally, mainframes can also be interconnected to allow for massive multi-channel capability.

The picture opposite shows equipment similar to that in use by our AOC customers for more than one year. This provides a highly cost effective system for production testing of parallel optical components and modules in the 5G as well as 10G range.

Due to the great flexibility of the system, cost is dependent on the modules fitted. Please contact Luceo for help in configuring your system, and for pricing information. We are also able to assist with on-site demonstrations and evaluation equipment.

A list of our global sales network can be found on our web-site:

[www.luceotec.com](http://www.luceotec.com)

## No Budget? No Problem!

There is a saying in English that 'there is a light at the end of the tunnel', meaning that things are improving. This seems to be a particularly appropriate statement for the fiber-optics market!

However, while things are getting better, many companies still have no, or restricted, capital equipment budgets for 2009.

To overcome this, Luceo has introduced a rental option, allowing companies to hire equipment by the month. On termination, there is also a purchase option whereby a large proportion of the rental cost is deducted from the purchase price,

Please contact Luceo for details.

## Why Modules?

Luceo's test solutions are modular in concept. But why?

Actually this is no accident, but a carefully considered strategy, as modular systems give key benefits:

- they are 'future-proof' in that systems will always be upgradeable to meet new requirements and standards
- they are expandable. Users are able to start with a basic system, and expand as and when needs and budget allow
- they minimize down time. With a standard bench top solution, repairs often mean shipping equipment to Japan or the USA for lengthy periods. But if a Luceo module becomes faulty, a replacement can quickly be fitted.

Not only can the equipment be configured the way you need it, thus saving costs on unnecessary features, but it can also be expanded and upgraded with great ease, merely by inserting new modules. For high volume production, mainframes can even be synchronized, offering multi channel capability.

### Calendar

FOE 2010, Jan 20-22, Tokyo, Japan

Lightwave Virtual Exhibition, Jan 28  
On-Line

DesignCon 2010 Feb 2-3, Santa  
Clara, CA, USA

OFC 2010 March 23-25 San Diego  
Center, San Diego, CA, USA

## LUCEO Technologies GmbH

LUCEO Technologies GmbH was created by engineers involved in optical transceiver design, who recognized critical gaps in test and measurement equipment for optical component and transceiver characterisation. Luceo's test system is the first to combine a complete BERT test solution, with affordable cost and German build quality. Targeted at high volume production test applications, Luceo's equipment optimizes speed and ease-of-use, allowing users to achieve minimum cost-per-test. Founded in 2005, Luceo is headquartered in Berlin, Germany, with offices in the USA and UK. For more information, visit [www.luceotec.com](http://www.luceotec.com)