

## European Calibration Center for Gentec Products

Since 2004, LASER COMPONENTS offers an in-house calibration service for laser power detectors. In 2015, we extended our service to include energy detectors as well.

Our calibration center was established in close cooperation with Gentec-EO and operates according to ISO 17025 standards.

Gentec's unique measurement accuracy over a broad wavelength range is a result of combining a basic calibration at 1064 nm with an individual measurement of the absorption characteristics from the UV to IR wavelength range for each detector by using a spectrophotometer (personal wavelength correction, "PWC").

Instead of supplying you with "typical values" only (as otherwise standard practice), Gentec offers you a genuine, traceable calibration for the whole wavelength spectrum between 250 nm and 2100 nm (up to 2500 nm upon request).

Performing subsequent calibrations in regular intervals ensures that you can rely on this outstanding accuracy for the entire lifecycle of your measurement equipment.

In order to obtain and maintain an ISO 9001 certificate, many laser applications require a regular calibration of the employed measurement tools. A typical time frame for this comprises 12 months.

The calibration we offer is NIST/PTB traceable, meaning all devices we use are calibrated by the National Institute of Standards and Technology or the Physikalische Technische Bundesanstalt (Federal Physical-Technical Institute) / DKD.

### Calibration at LASER COMPONENTS offers the following benefits:

- Visual inspection (incoming inspection)
- Determining the individual wavelength profile by spectrophotometer (detectors with PWC)
- Calibration against the "gold standard" reference, NIST/PTB traceable (all detectors)
- Verification measurement (max. allowed deviation is 1%)
- Storing the sensitivity value and PWC factors in the detector EEPROM
- Calibration certificate incl. PWC sheet and variance report

The calibration itself is performed using a suitable laser source at 1064 nm vs. a "gold standard" detector head. This reference detector is periodically calibrated at NIST or PTB. Thanks to the exclusive use of a "gold standard" reference, LASER COMPONENTS – much like Gentec-EO – achieves an unrivaled calibration precision (first level calibration).

Most other vendors calibrate a detector using only a "silver standard" detector, i.e., a self-made "copy" of the "gold standard" with all its inaccuracies (second level calibration).

All German and European users of laser measurement devices from Gentec-EO benefit from the calibration offered by LASER COMPONENTS. The close proximity to our customers translates into reduced cost and saved time because the units do not have to be sent to Canada.



### Important General Notes:

- We can calibrate "standard" detectors from Gentec-EO only (with DB-15 connector for use with Gentec-EO monitors).
- For calibration of customized products, or if you need any customized or special calibration (recognizable in your original calibration certificate from Gentec), please contact us in advance and provide a copy of the original certificate.
- In case an extension cable is used (power detectors only), please send it together with the corresponding detector; we will need to update its integrated EEPROM, too.
- Damaged items or items outside of their technical specifications (caused e.g. by overheating, degradation effects, or mechanical/electronic defects) cannot be calibrated successfully. In this case, we will provide an error report and, if requested, a quotation for further evaluation at Gentec-EO Canada.
- Usually, our calibration certificates are issued in the name of the contracting principal. If you need a different name on the document, please provide this information in advance.

## Do you need a quote for a calibration?

Please click here:

Please provide me with a quote for  
a calibration of

Power meter (Gentec-EO)

Energy meter (Gentec-EO)

Monitor (Gentec-EO)

Type of device: \_\_\_\_\_

Serial number(s): \_\_\_\_\_

Sender:

\_\_\_\_\_  
Company

\_\_\_\_\_  
Department

\_\_\_\_\_  
Contact person

\_\_\_\_\_  
Street / ZIP code / City

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Phone

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Fax

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E-mail

For further information please contact our product engineer:

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