

Laser Beam Emits Parallel to the Housing 532 nm Precision Laser Module

The origin of their precision is their alignment. In practice, this means that the laser beam of precision lasers is emitted parallel to the housing. Contrary to popular belief, this is not a given.

Standard laser modules exhibit an angular error of 0.5° or more. This means that at a distance of 1 m, the laser beam lands almost 10 mm away from the axis of the housing. If the laser is mechanically adjustable, this does not matter. If, however, the alignment of the laser is not possible because, for example, it is placed in a fix bore hole or adjustment is too complex, then LASER COMPONENTS' precision laser is used.

The angular deviation of the LTPLM-532 amounts to 0.05 mrad or ± 0.05 mm at a distance of 1 m. This is an improvement of 200 times over the example shown above – and essential if machines or components have to be aligned very precisely.

A precision laser is also available with a 532 nm green laser light for mere visual alignment in a bright environment. The ability to recognize green light over red light on very dark surfaces or under daylight-like conditions is vastly improved. In addition, the dot is smaller and appears sharper, especially at shorter distances.

The precision laser is available with two types of housings: round with a diameter of 24 mm or square with a 32 mm edge length. The round lasers have an h6 fit for assembly at zero clearance. The power supply of up to 30 VDC is in the form of an integrated M12 connection. With an output power of 1 mW, these laser modules are eye safe in accordance with laser class 2.

More Information

www.lasercomponents.com/lc/product/precision-laser-modules/

Trade Shows

LaSys, May 31-June 02, 2016, Messe Stuttgart, **Booth 4A16**
AngaCom, June 07-09, 2016, Messe Köln, **Hall 10.2, Booth J35**
Optatec, June 07-09, 2016, Messezentrum Frankfurt/Main, **Hall 3, Booth E01**
Photonex Scotland Roadshow, June 08, 2016, Heriot Watt University UK, **Booth S22**
Optical Interference Coatings (OIC), June 19-24, 2016, Tuscon, AZ, USA
Sensors Expo & Conference, June 22-23, 2016, San Jose, US, USA, **Booth 1040**
Automatica, June 21-24, 2016, Messe München, **Booth B5.503**
Photon16, September 06-07, 2016, University of Leeds UK, **Booth 5**
ECOC 2016, September 19-21, 2016, Düsseldorf, **Booth 102**
SPIE Security + Defence 2016, September 27-28, 2016 Edinburgh, UK, **Booth 405**
Photonex Coventry 2016, October 1-13, 2016, Ricoh Arena UK, **Booth D15**
VISION 2016, November 08-10, 2016, Messe Stuttgart, **Booth 1C33**
Electronica 2016, November 08-11, 2016, Messe München, **Booth B1.306**

The Company

LASER COMPONENTS specializes in the development, manufacture, and sale of components and services in the laser and optoelectronics industry. At LASER COMPONENTS, we have been serving customers since 1982 with sales branches in five different countries. We have been producing in house since 1986 with production facilities in Germany, Canada, and the United States. In-house production makes up approximately half of our sales revenue. A family-run business, we have more than 200 employees worldwide.