

Optical Options for Laser Diode Systems

A variety of optical options and lenses are available for our diode laser modules. Since not all options can be utilized with all models, this information provided is mainly intended for optical engineers. We highly recommend our assistance for your specification of options.

Wavefront Analysis is available upon request with module purchase as well as Collimation Analysis to 1/50th of a wave. Matched prism pairs are only utilised in ACM and APM modules in combination with an astigmatic lens and a glass aspheric lens to circularize the laser output beam.

Glass Lens Option	Aperture (mm)	Num. Aperture	Effective Focus Length (mm)	Optical Efficiency	Remark
G	4,52	0,48	4,52	95%	3 Element Glassoptic
G1B	2,00	0,50	2,00	106%	Smallest Beam Diameter
G1C	2,00	0,50	2,00	106%	Smallest Beam Diameter
G2B	4,96	0,55	4,51	114%	Best Output
G2M-1K	4,89	0,53	4,60		
G2C	4,96	0,55	4,51		
G3B	5,00	0,40	6,24	100%	Best Collimation at 3m
G3B-1	5,35	0,40	6,25		
G4B	8,00	0,50	8,00	90%	Best Collimation in total
G4C	8,00	0,50	8,00		
G5B	5,50	0,25	11,00	98%	
G6B	4,50	0,14	12,00	80%	Best Circulation
G7	3,70	0,30	6,16		
G7B	3,70	0,30	6,16	81%	
G7B-1C	5,35	0,40	6,25		
G7C	3,70	0,30	6,16		
G8B	5,00	0,16	15,36	91%	
G9B	5,50	0,15	18,40	76%	
G10B	5,90	0,39	7,00		
G11B	4,00	0,50	4,78		

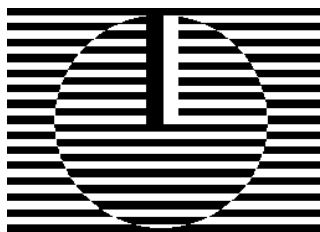
Glass Lens Options

Our G option lenses are aspherics made from high quality optical glass with anti-reflection coatings and focal lengths from 2mm to 18mm. The G3 lens is standard for most modules, but other lenses may be substituted. Substituting lenses may change the units price. Our standard lens, G3, is a high quality glass lens that is suitable even for most commanding applications.

Plastic Lens Option	Aperture (mm)	Numerical Aperture	Effective Focus Length (mm)
P	4,50	0,28	9,53

Plastic Optics

A high quality, low cost plastic lens is used in the RS and LPM models.



Linien Linsen Option	Voller Fächerwinkel (Grad)	Linien Länge (mm) bei 305 mm Abstand
L0	2.8°	12,7
L1	60°	350,5
L2	36°	198,0
L3	18°	96,5
L5	30°	163,0
L6	15°	78,7
L7	7.6°	38,0
L8	5.5°	30,5
L9	4.0°	20,3
L10	90°	610,0
L11	0.7°	3,7
The fan angle indicated applies to single-mode laserdiodes only		

Line Generating Lens Options

Our L-Option lenses are Cylindrical Lenses typically made from BK7 optical glass with anti-reflection coatings. Several angles of divergence are available. Fan angle statements are relates only to single mode lasers.

Polarization Indikator

Beams are typically linearly polarized with a ratio between 30:1 and 300:1. Direction of the S and P polarization vectors can be indicated on the laser module on request.