



Attenuation Unit 90° - Technical Data -

The attenuation unit is based on a zinc selenide (ZnSe) beam slitter and can be mounted in four positions on the LaserDec aperture. It is designed for a 45° angle of incidence and can be used up to intensities of 5kW/cm^2 . The absorbed heat is dissipated by cooling water whereby thermal lens effects are eliminated. The water-cooling allows the utilization of lasers up to powers of 3 kW. To avoid interference patterns the beam splitter is designed as wedge angle.

	AU-SP-90	AU-33-90	AU-50-90
Spectral range*:	10.6µm	10.6µm	10.6µm
Polarization:	Polarization-dependent	Polarization-independent	Polarization-independent
Reflection rates:	$R_S\!\!=\!\!28\% \ / \ R_P\!\!=\!\!7.8\%$	R=33.3%	R=50%
Angle of incidence:	45°	45°	45°
Aperture:	Ø=26mm	Ø=26mm	Ø=26mm
Beam diameter (1/e²) LaserDec CL200:	max. 10mm	max. 10mm	max. 10mm
Beam diameter (1/e²) LaserDec CL500:	max. 15mm	max. 15mm	max. 15mm
Wedge angle:	1°	6-10min	6-10min
Surface:	S1=plan - uncoated S2=plan - AR	S1=plan - 33.3%R S2=plan - AR	S1=plan - 50%R S2=plan - AR
Intensity (I _{max}):	5kW/cm ²	3kW/cm ²	3kW/cm ²
Power (P _{max}) LaserDec CL200:	$700W (R_S) / 2.5kW (R_P)$	600W	400W
Power (P _{max}) LaserDec CL500:	$1.7kW~(R_S) / 3kW~(R_P)$	1.5kW	1kW
Water-cooling:	21/min / 2bar	21/min / 2bar	21/min / 2bar
Hose diameter:	OD=8mm	OD=8mm	OD=8mm

^{*} Different parameters on request

Design and specification of the described product(s) are subject to change without notice.

