



Polarization Components

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Selection Guide

Diagram	Product Type	Operating Conditions	Extinction Ratio T_p/T_s	Polarization Bandwidth	Transmission Efficiency	Page
	Glan-Taylor Polarizing Prisms PTY, PTYL		1×10^{-5} , 5×10^{-5}	250–2300 nm	95% T_p	10.3
	Glan-Thompson Polarizing Prisms CLPG, PTOL	10 mJ/cm ² , 20 nsec, 20 Hz; 10 W/cm ² , cw at 1064 nm typical	5×10^{-5}	400–2300 nm	95% T_s	10.5
	Glan-Thompson Polarizing Beamsplitters CPBS	10 mJ/cm ² , 20 nsec, 20 Hz; 10 W/cm ² , cw at 1064 nm typical	10^{-5}	350–2200 nm	95% T_s 90% T_p	10.7
	GLAN-LASER POLARIZERS Linear CLPA	100 mJ/cm ² , 20 nsec, 20 Hz; 100 W/cm ² , cw at 1064 nm typical	5×10^{-5}	400–2300 nm	95% T_p	10.8
	Single Escape Window CPAS	500 mJ/cm ² , 20 nsec, 20 Hz; 500 W/cm ² , cw at 1064 nm typical	5×10^{-5}	400–2300 nm	95% T_p	10.9
	Double Escape Window CPAD	500 mJ/cm ² , 20 nsec, 20 Hz; 500 W/cm ² , cw at 1064 nm typical	5×10^{-5}	400–2300 nm	95% T_p	10.9
	High-Power UV PGU	500 mW/cm ² typical	1×10^{-6}	200–270 nm		10.10
	Wollaston Prism Polarizers WLST	10 mJ/cm ² , 20 nsec, 20 Hz; 10 W/cm ² , cw at 1064 nm typical	10^{-5}	300–2200 nm	95% T_s and T_p	10.11
	Beam-Displacing Prisms PBD, PBDL		1×10^{-4} , 5×10^{-5}	400–2300 nm	95% T_s and T_p	10.12
	Rochon Prism Polarizers RCHP	Calcite - 10 mJ/cm ² MgF ₂ - 100 mJ/cm ² 20 nsec, 20 Hz; 10 W/cm ² , cw at 1064 nm typical	10^{-5}	150–8000 nm	95% T_s and T_p	10.13
	Glan Brewster-Angle Air-Spaced Polarizers CPBA	1 J/cm ² , 20 nsec, 20 Hz; 500 W/cm ² , cw at 1064 nm typical	5×10^{-4}	400–2300 nm	99% T_p	10.14

Selection Guide (continued)

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	POLARIZING CUBE BEAMSPLITTERS Broadband PBSH	500 mJ/cm ² , 20 nsec, 20 Hz; 100 W/cm ² cw at 515 nm	500:1	>250 nm at 532 nm	90%	10.15
	High-Energy Broadband PBSK	5 J/cm ² , 20 nsec, 20 Hz; 1 MW/cm ² cw at 1064 nm	10 ³ :1 at 1064 nm	140 nm at 532 nm	92% at 800 nm	10.16
	Laser-Line PBS	1 J/cm ² , 20 nsec, 20 Hz at 1064 nm; 100 W/cm ² cw at 515 nm	1000:1	25 nm at 515 nm	95%	10.17
	UV Laser-Line UPBS	10 mJ/cm ² , 20 nsec, 20 Hz; 10 W/cm ² cw at 266 nm	100:1	5 nm at 257 nm	90%	10.18
	High-Energy Laser-Line PBSO	5 J/cm ² , 20 nsec, 20 Hz; 1 MW/cm ² cw at 1064 nm	200:1 at 1064 nm	5–10 nm at 1064 nm	95% at 1064 nm	10.19
	High-Contrast Plate Polarizers FPC		> 100,000:1	372–2000 nm	>88%	10.20
	Dichroic Sheet Polarizers FPG		1 × 10 ⁻⁴	380–780 nm	>80%	10.23
	Thin-Film Plate Polarizers 56° TFP	20 J/cm ² , 20 nsec, 20 Hz; 1 MW/cm ² cw at 1064 nm	200:1 at 1064 nm	5 nm at 1064 nm	95% at 1064 nm	10.24
	45° TFPN	10 J/cm ² , 20 nsec, 20 Hz; 1 MW/cm ² cw at 1064 nm	500:1 at 1064 nm	6–8 nm at 1064 nm	97% at 1064 nm	10.25
	Low-Dispersion Polarizers TFPK	5 J/cm ² , 50 fsec pulse; 50 kW/cm ² cw at 800 nm	15:1 T_p^2/T_s^2 where T_p and T_s are per surface transmission	100 nm at 800 nm	96% at 800 nm	10.26
	Polarization Rotators RT	10 J/cm ² , 20 nsec, 20 Hz; 1 MW/cm ² cw at 1064 nm		10 nm at 1064 nm		10.27
	Depolarizers DPL	2 J/cm ² , 20 nsec, 20 Hz; 500 kW/cm ² cw at 1064 nm		40 nm at 1064 nm	99% at 1064 nm	10.28