
FastPulse Technology, Inc.**LASERMETRICS® DIVISION****220 Midland Ave., Saddle Brook, NJ 07663****TEL: 973-478-5757 · FAX: 973-478-6115****Web Site: www.fastpulse.com**

**BPZ Series
ZnSe BREWSTER ANGLE
POLARIZER**

- **HIGH POWER HANDLING:** ≥ 50 Watts
- **HIGH TRANSMISSION:** $T_p \geq 95\%$
- **BROADBAND IR:** 1 μm to 11 μm MWIR
- **HIGH EXTINCTION:** 27-33dB (>1000:1 Typical)
- **LOW BACK SCATTER REFLECTIONS:** <-40dB
- **PROTECTIVE HOUSING**
- **OPEN/CLOSE ESCAPE PORT DOORS.**



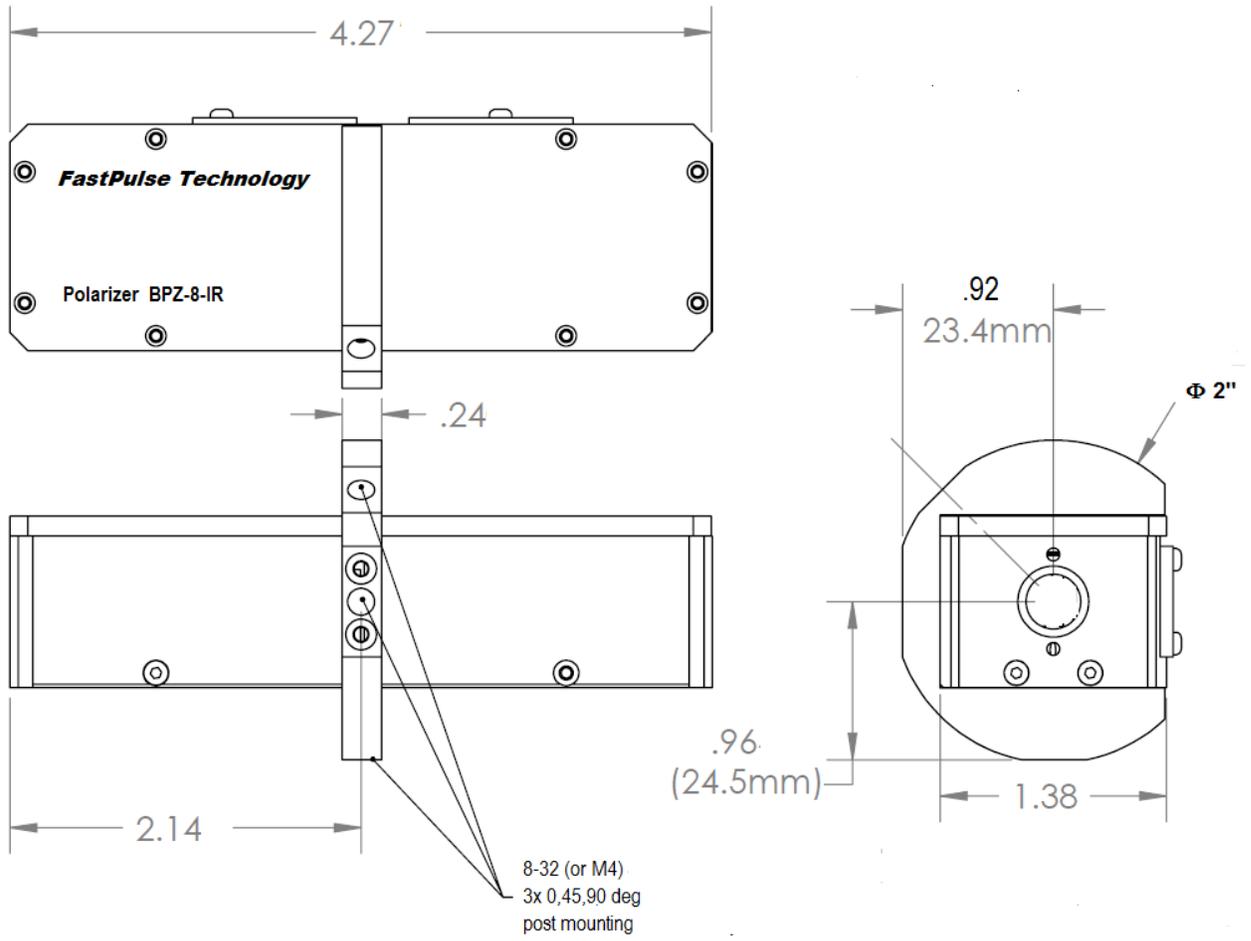
Selection of an IR polarizer can be a complex process. Special designs are expensive and most still have modest transmission and limited bandwidth. Many IR polarizer optics are fragile and easily damaged if cleaned or handled. Our unique ZnSe polarizer assembly uses multiple plates in a proprietary arrangement to provide users with a high performance polarizer for IR applications. This user friendly design facilitates inclusion into most optical systems. Precision cement-free mounting methods insure stress-free high performance. The choice of ZnSe also allows for the use of visible 633nm and NIR alignment lasers in your system.

As more IR sources such as MWIR Quantum Cascade QC lasers become available, the need for high transmission polarizers is critical. Increasing laser power also necessitates the well-defined power handling of ZnSe optics to insure a high level of confidence in high power systems.

For applications within the 1.9-3.4 μm region, FastPulse Technology also offers traditional crystal, absorptive and reflective polarizer options to provide optimal characteristics trading size, bandwidth, power handling and cost. We also offer the most extensive optical isolator product line anywhere for this spectral region.

Part Number	BPZ-8-IR
Clear Aperture	8 mm
Bandwidth	1 micron to 11 microns Wave Numbers 900 to 10,000
Power Handling	>50W
Extinction	>1000:1
Transmission, T_p	95-97%
Backscatter Reflection	<-40 dB
Beam Deviation	<5 minutes
Dimensions:	109mmx35mmx26.7mm (4.3"x1.4"x1.05")

These polarizers are also incorporated into our 2110/2115 Series and other Optical Isolator models.



SERIES BPZ-8-IR 8 mm Aperture Polarizer