

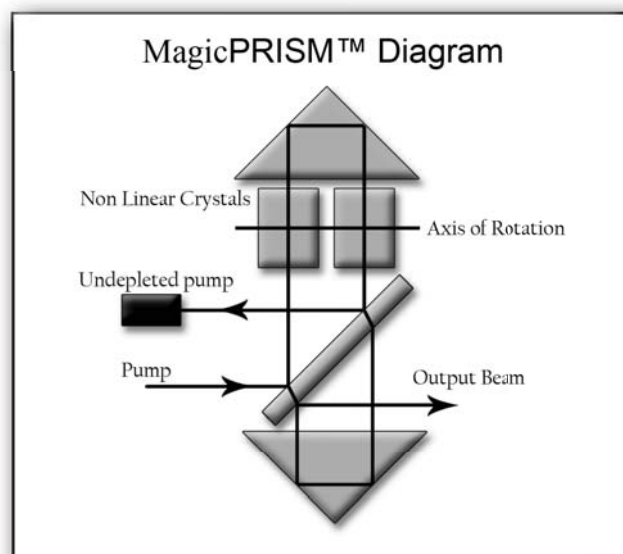


MagicPRISM™

The MagicPrism™ is a **compact, motorized** optical parametric oscillator (OPO) module with a **conversion efficiency as high as forty percent**. Based on patented* OPOTEK OPO technology, the MagicPrism™ is a **ring oscillator** in which the pump and the OPO beams travel in the same direction. Two nonlinear crystals are positioned on a computer controlled, motorized rotation stage to achieve tuning. This configuration results in **walk-off canceling** and **eliminates beam steering** throughout the entire wavelength range.

The pump beam is coupled into the ring cavity, and the signal and idler beams are coupled out of the ring cavity by a coated beam splitter. These design attributes produce highly stable and efficient output.

The MagicPrism™ OPO is offered as a stand-alone accessory to be pumped by the end-user's laser. The MagicPrism™ can be pumped either by 355 nm or 532 nm nanosecond laser pulses. The laser specifications required to pump the OPO are listed below:



Pump Laser Requirements

- Pump Wavelength: 355 or 532 nm
- Pump Energy: 100 -200 mJ/pulse
- Pulse Width: 5 -10 ns
- Beam Diameter: 6 mm
- Beam Profile (near field): > 75% Gaussian
- Beam Divergence: < 0.5 mrad



Pump Laser Requirements

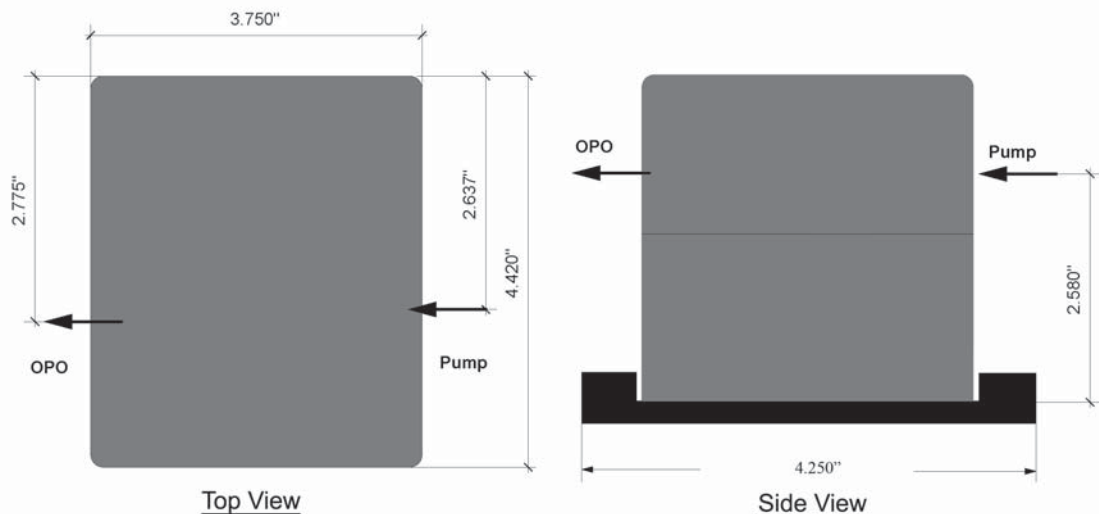
Pump Wavelength	355 or 532 nm
Pump Energy	100 - 200 mJ/pulse
Pulse Width	5 - 10 ns
Beam Diameter	6 mm
Beam Profile (near field)	> 75 % Gaussian
Beam Divergence	< 0.5 mrad

Wavelength Tuning Ranges

MagicPRISM™ VIS	410 - 680 nm
MagicPRISM™ VIR	410 - 680 nm and 740 - 1200 nm
MagicPRISM™ NIR	680 - 950 nm
MagicPRISM™ NIR-D	680 - 950 nm and 1200 - 1700 nm

Laser Head Dimensions

Weight: 3.6 lbs



MagicPRISM™ Power Supply

Dimensions	3" (H) x 7.75" (W) x 11" (L)
Voltage	Single phase, 110 - 240 V
Input Power	< 4 W