Magic PRISM

OPOTEK

Compact OPO module for 355 or 532 nm
Nd:YAG pump lasers

The MagicPRISM is a compact, motorized optical parametric oscillator (OPO) module with a conversion efficiency as high as forty percent.

FEATURES

- Stand-alone OPO module, compatible with most nanosecond Nd:YAG pump lasers
- Computer controlled tuning via control software/software development kit (SDK)
- Shipped with protective hard shell casing (PHSC)
- Requires alignment kit (AK) or Qsmart adapter (QSA) for alignment/mounting
- Warranty: One year on mechanical, electronics, and labor

OPTIONS

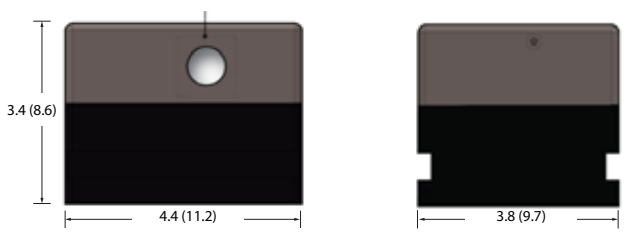
Protective Hard Shell Cases (PHSC)
Includes two protective hard cases with custom foam padding.

Idler Access (ID)
Extends tuning range to include 740 – 1200 nm
Decreases SIGNAL performance by 10%

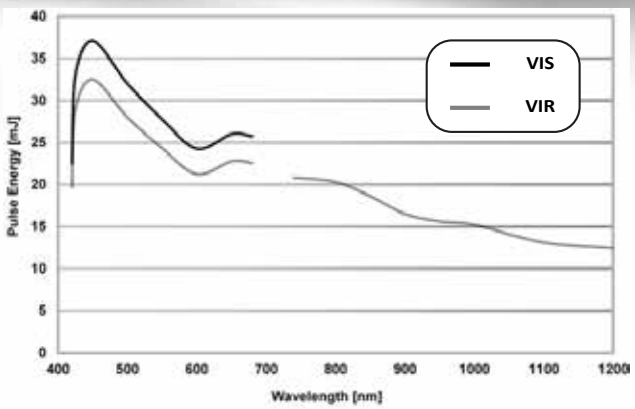
Alignment Kit (AK)
Stand-alone alignment kit for MagicPRISM pump beam. End-user alignable. Does not include turning mirrors.

Fast Tuning
NIR and NIRD only. Wavelength can be tuned to any value within 690 - 950 or 1200 - 1700 nm at every pulse

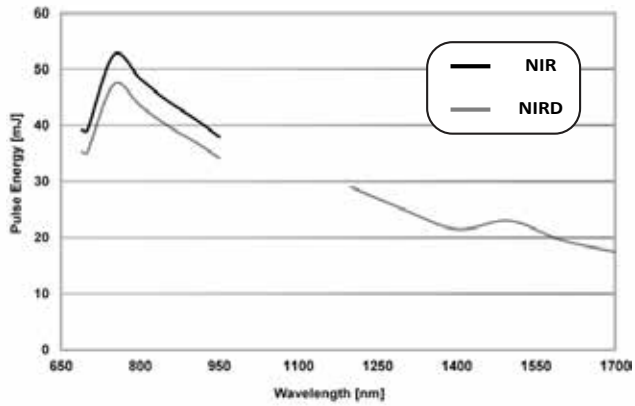
DIMENSIONS



All dimensions approximate in inches (centimeters)



Typical performance when pumped with 90 mJ of 355 nm. Actual results may vary depending on pump laser.



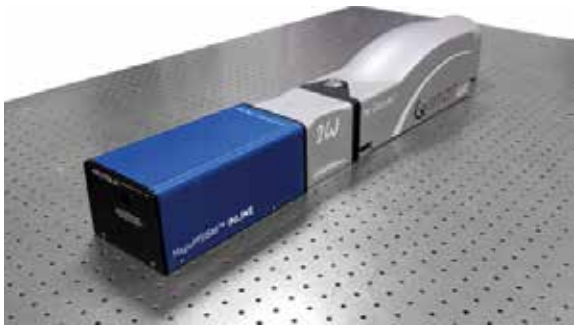
Typical performance when pumped with 140 mJ of 532 nm. Actual results may vary depending on pump laser.

Product	VIS / VIR	NIR / NIRD
Wavelength range		
VIS (nm)	420 - 680	N/A
VIR (nm)	420 - 680 and 740 - 1200	N/A
NIR (nm)	N/A	690 - 950
NIRD (nm)	N/A	690 - 950 and 1200 - 1700
Peak Pulse Energy (mJ): VIS (VIR), NIR (NIRD)	37 (32)	53 (48)
Polarization	Horizontal	Horizontal
Pump Laser Requirements		
Pump Wavelength (nm)	355	532
Max pump pulse energy (mJ)	90	140
Pulse Duration (ns)	6 - 8	6 - 8
Beam Divergence (mrad)	< 0.5	< 0.5
Linewidth (cm^{-1})	5 - 80	30 - 80
Pulse Pulse Stability (%)	< 4	< 2
Pulse Repetition Rate (Hz)	10	20
Physical Characteristics: LxWxH - inches (cm)	3.8 x 4.4 x 3.4 (9.7 x 11.2 x 8.6)	3.8 x 4.4 x 3.4 (9.7 x 11.2 x 8.6)

DANGER

Magic PRISM INLINE

OPOTEK



Stream-lined housing that connects
pump laser, harmonics and OPO module

Based on Ring-Cavity optical parametric oscillator (OPO) technology, the MagicPRISM Inline is a cost effective laser source that generates wavelengths over a broad range in the VIS and IR.

FEATURES

- Stand-alone OPO module, compatible with most nanosecond Nd:YAG pump lasers
- Computer controlled tuning via control software/software development kit (SDK)
- Shipped with protective hard shell casing (PHSC)
- Requires alignment kit (AK) or Qsmart adapter (QSA) for alignment/mounting
- Warranty: One year on mechanical, electronics, and labor

OPTIONS

Protective Hard Shell Cases (PHSC)
Includes two protective hard cases with custom foam padding.

Idler Access (ID)
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Fast Tuning
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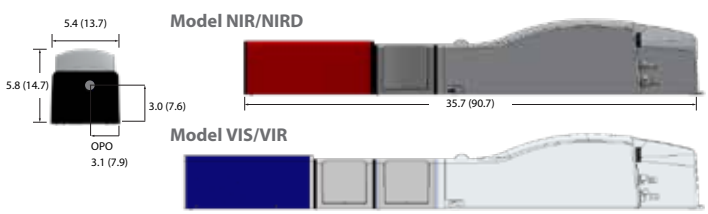
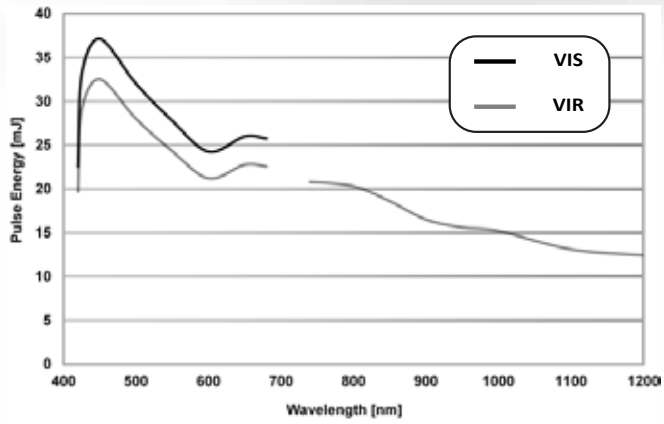
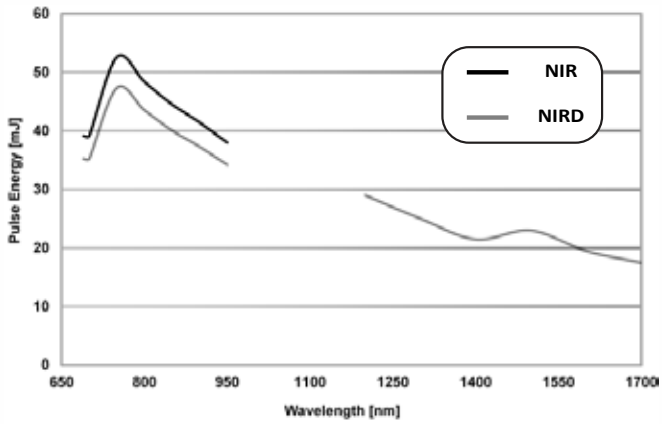
DIMENSIONS



All dimensions approximate in inches (centimeters)





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Wavelength range		
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VIR (nm)	420 - 680 and 740 - 1200	N/A
NIR (nm)	N/A	690 - 950
NIRD (nm)	N/A	690 - 950 and 1200 - 1700
Peak Pulse Energy (mJ): VIS (VIR), NIR (NIRD)	40 (35)	50 (45)
Polarization	Vertical	Vertical
Pump Laser Requirements		
Pump Wavelength (nm)	355	532
Max pump pulse energy (mJ)	90	140
Pulse Duration (ns)	6 - 8	6 - 8
Beam Divergence (mrad)	< 0.5	< 0.5
Linewidth (cm^{-1})	5 - 80	30 - 80
Pulse Pulse Stability (%)	< 4	< 2
Pulse Repetition Rate (Hz)	10	20
Physical Characteristics: LxWxH - inches (cm)	40.5 x 5.4 x 5.8 (103 x 13.7 x 14.7)	35.7 x 5.4 x 5.8 (90.7 x 13.7 x 14.7)