

# KTP

Potassium Titanyle Phosphate -  $\text{KTiPO}_4$

## MAIN FEATURES

- Small walk-off angle in the XY plane
- High non-linear optical efficiency
- Broad temperature acceptance

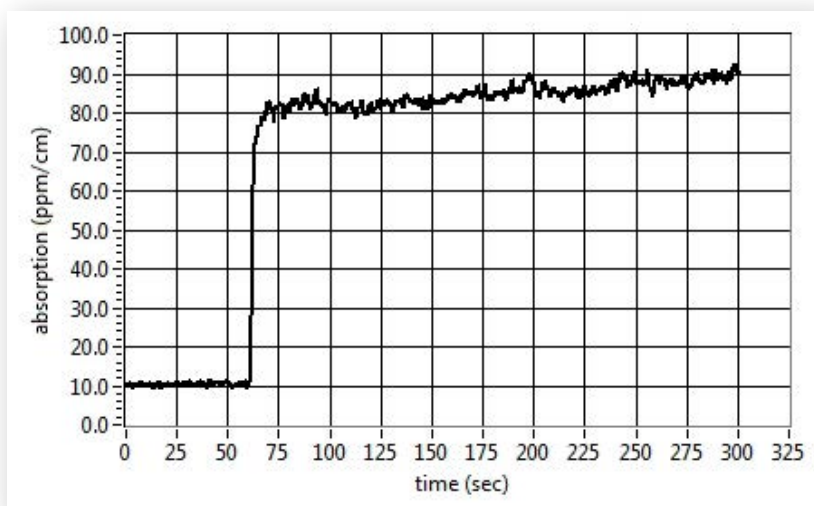
## APPLICATIONS

- Mid-high average power eye-safe lasers
- Pulsed or CW green medical lasers
- OPO systems for detection or space applications

## WHAT MAKES US DIFFERENT?

- Available in a grey-track resisting version:  $\text{KTP.fr}^{\text{TM}}$
- Each part is tested for optical and non-linear homogeneity on a standardized laser bench
- Low bulk absorption:  $<100\text{ppm/cm}$  at 1064nm
- High damage threshold of bulk and coatings
- Available in cross-section up to  $20\times 20\text{mm}^2$  and up to 35mm in length
- Large manufacturing capacity of OPO crystals

## TECHNICAL HIGHLIGHTS



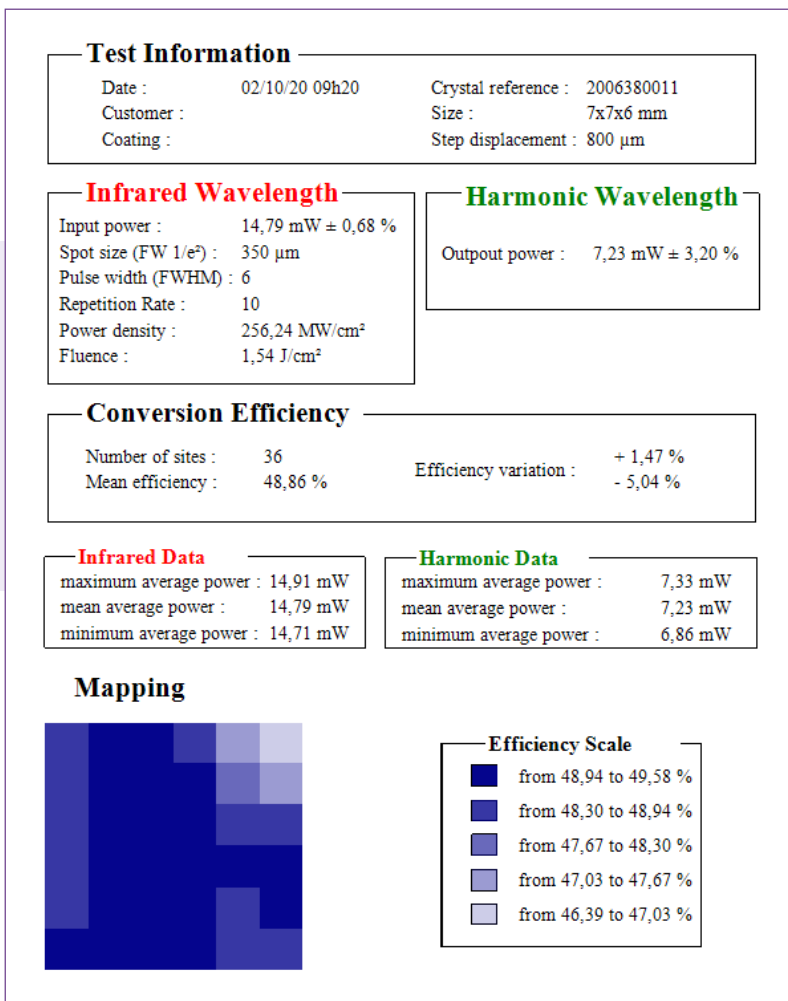
Green-Induced Absorption scan at 1064nm of  $\text{KTP.fr}^{\text{TM}}$  crystal:

material doesn't develop grey-track under 532nm-illumination.

# TECHNICAL HIGHLIGHTS

OPO efficiency test report,  
based on our standardized laser  
bench:

efficiency variation stays within  
less than 10% from mean value.



## LASER DAMAGE CERTIFICATION

### PASS

**632.5 MW/cm<sup>2</sup> or 11.3 J/cm<sup>2</sup>**

<b>Customer:</b> Quantel USA	<b>Certificate No.:</b> 180011E #1
<b>Purchase Order No:</b> N/A	<b>Issued:</b> 10/11/2018
<b>Substrate Material:</b> KTP	<b>Coating Type:</b> AR
<b>Part No:</b> 91720003	<b>Run Number:</b> 404580001
	<b>Tested On:</b> Arrow Side

**Special Requirements:** Per BSLT-172

<b>Wavelength (nm):</b> 1064	<b>Spot Diam. (mm):</b> 0.371
<b>Rep. Freq. (Hz):</b> 20	<b>Incidence Ang. (deg.):</b> Normal
<b>Pulse Width (ns):</b> 16.0	<b>Polarization State:</b> Linear
<b>Axial Modes:</b> Multiple	<b>Transverse Modes:</b> TEM <sub>00</sub>
<b>No. Sites:</b> 1	<b>No. Shots/Site:</b> >10,000

Laser-induced Damage  
threshold certification :

**Pass > 10J/cm<sup>2</sup>, 1064nm**

# SPECIFICATIONS

<b>Aperture</b>	Up to 25x25mm <sup>2</sup>
<b>Length</b>	Up to 35mm
<b>Flatness</b>	< $\lambda$ /10 @633nm
<b>Wavefront distortion</b>	< $\lambda$ /8 @633nm
<b>Parallelism</b>	Down to 5"
<b>Perpendicularity</b>	Down to 5 arc min.
<b>Scratch and dig</b>	<2/1
<b>Bulk absorption</b>	<100 ppm/cm@1064nm
<b>Damage threshold</b>	>10J/cm <sup>2</sup> @1064nm, 10ns 10Hz

*Ordering Information:*



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