

KTP

Potassium Titanyle Phosphate - KTiOPO_4

MAIN FEATURES

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

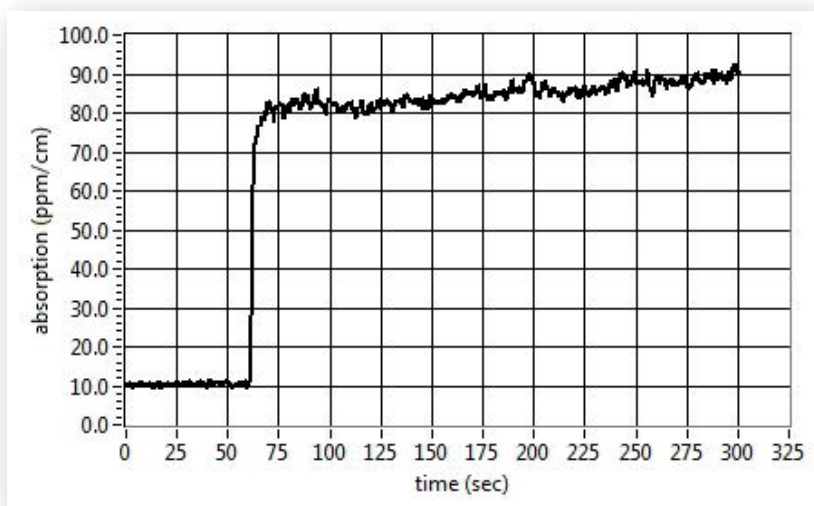
APPLICATIONS

- 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



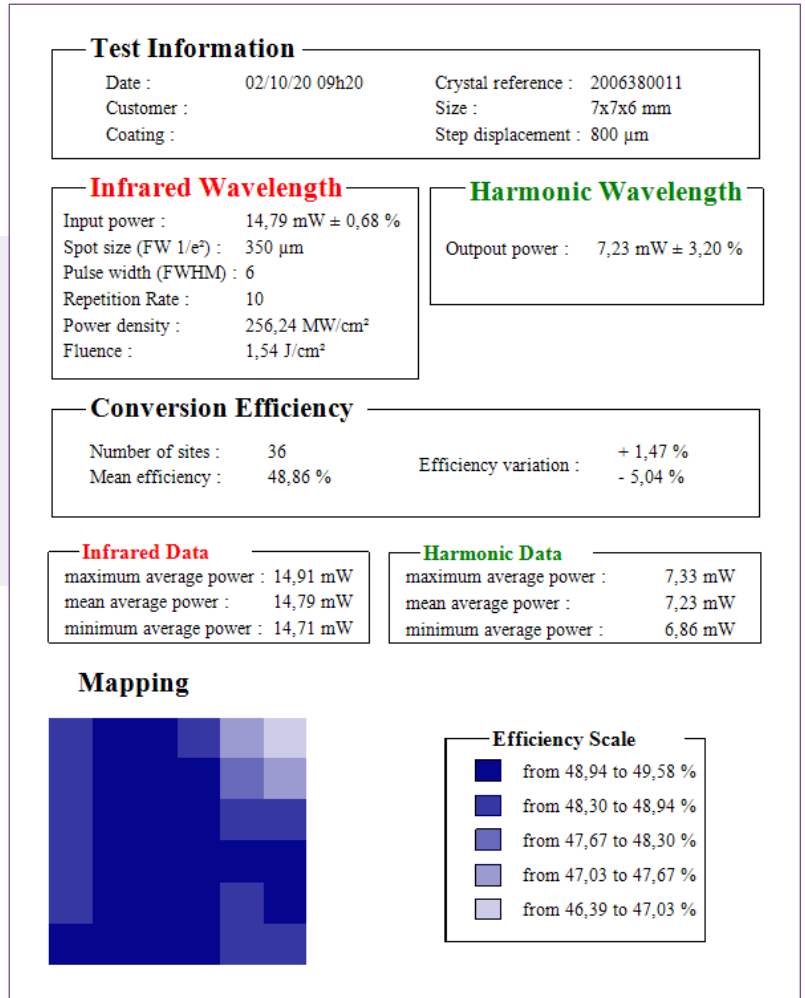
Green-Induced Absorption scan at 1064nm of $\text{KTP.fr}^{\text{TM}}$ crystal:

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/cm² or 11.3 J/cm²

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

Special Requirements: Per BSLT-172

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

Laser-induced Damage
threshold certification :

Pass > 10J/cm², 1064nm

SPECIFICATIONS

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

