

GHz OPO-X Optical Parametric Oscillator

Tunable Femtosecond Pulses with GHz Repetition Rate

- GHz OPO-X by APE is a GHz Optical Parametric Oscillator (OPO) providing tunable femtosecond pulses in the near-infrared (NIR), visible (VIS) as well as infrared (IR) wavelength region.
- It is an ideal choice to add new wavelength ranges to GHz repetition rate Ti:Sapphire lasers, such as *taccor tune* made by *Laser Quantum*.



- GHz repetition rate OPO for Ti:Sa lasers
- Completely automated and fully computer controlled
- Tunable from < 530 ... 740 nm (VIS), 1000 ... 1600 nm (NIR) and 1750 ... 4100 nm (IR)
- TCP/IP remote control with standardized command set for easy programming
- Integrated high resolution spectrometer and power performance monitoring

GHz OPO-X Specifications

Required Pump Source

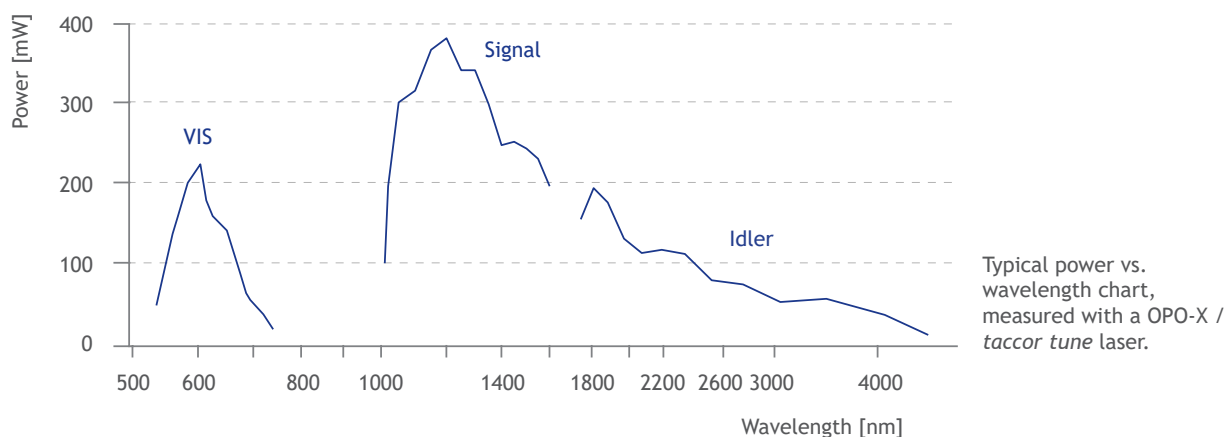
Pump Laser Type	GHz Ti:Sa Laser, e.g. <i>taccor tune</i> by Laser Quantum (> 1.8 W; 10 nm bandwidth); other types possible on request
Pump Wavelength	750 - 850 nm

OPO Specifications

Tuning Range	1000 ... > 1500 nm (typically 1600 nm) (Signal) 1750 ... 4100 nm (Idler) * < 530 ... 740 nm (VIS) *
Output Power **	> 250 mW at 1200 nm (Signal); > 100 mW at 1900 nm (Idler); > 150 mW at 600 nm (VIS)
Pulse Width	Typ. 200 fs
Time Bandwidth Product	Typ. 0.6
Repetition Rate	Equal to the repetition rate of the pump laser, ~ 1 GHz
Polarization	Signal, Idler: Horizontal, linear; VIS: Vertical, linear
Beam Quality M^2	< 1.2 (Signal, VIS)
Divergence	Typ. 0.8 mrad (Signal)

*Available as option **At pump power > 1.8 W and 10 nm bandwidth

Power vs. Wavelength (typical)



Options

- IR Idler access (1750 ... 4100 nm)
- VIS (< 530 ... 740 nm) generation with intracavity SHG
- Pulse compressor

Dimensions

1169 mm x 205 mm x 402 mm (W x H x D)

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