

# AUTOMATIC OPTICAL PARAMETRIC OSCILLATOR



## Extremely Widely-Tunable Automatic Optical Parametric Oscillator

### MODEL COPO 2200A

- 210-340 nm/420-690 nm/730-2200 nm tuning range
- Automatic operation and wavelength control
- Availability of adaptation to a variety of pump lasers

- ◆ Optical parametric oscillation in BBO crystal allows one to cover the broadest operational spectrum range (420 to 2200 nm). The SHG module for signal wave extends the tunability range to UV region (210 to 340 nm).
- ◆ Careful testing and selection of BBO crystals ensure long-term reliable operation.
- ◆ The originally-designed intracavity optics and mechanics allow avoidance of cavity misalignment and minimization of the required components.
- ◆ Interchangeable focusing UV-optics permit COPO2200A adaptation to a variety of pump lasers.
- ◆ PC control of BBO nonlinear crystal, frequency doubler, cavity mirrors and separator combined with original Software make COPO2200A friendly in operation.
- ◆ The good combination of carefully-designed COPO2200A and compact SL40-2 Spectrometer allows you to tune and control output wavelength as easily as to switch between the channels in your TV set.

## SPECIFICATIONS

### PUMP REQUIREMENTS

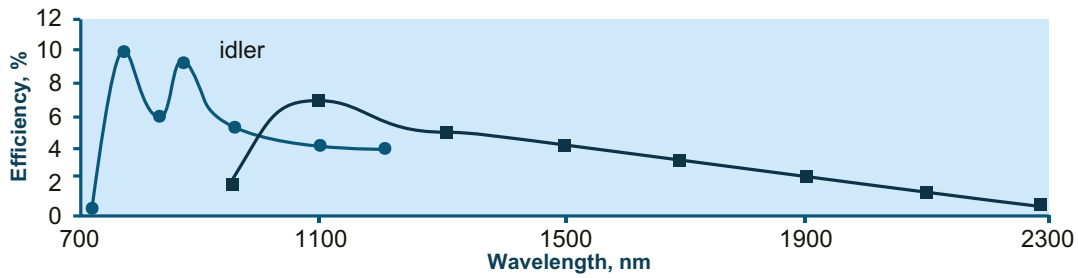
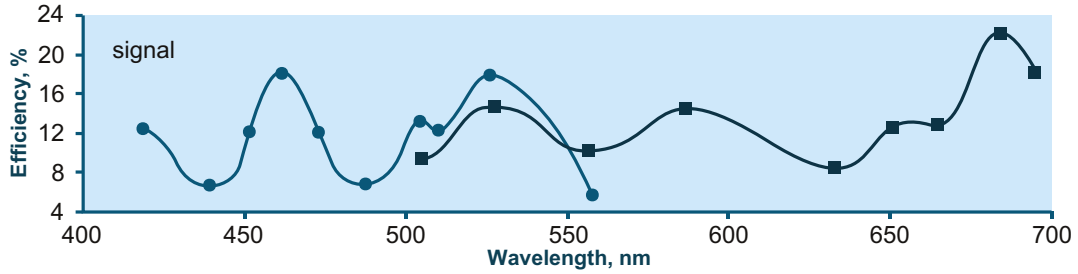
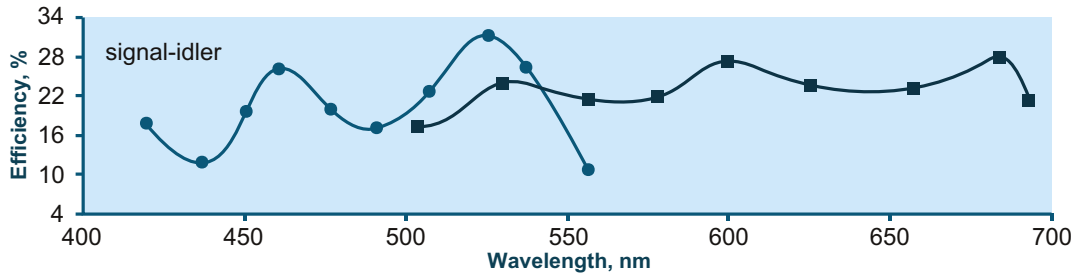
Wavelength:	355 nm
Max. pulse energy:	20-150 mJ
Pulse width:	8-20 ns
Beam diameter:	$\leq 8,0$ mm
Beam divergence:	$\leq 3,5$ mrad
Pulse repetition rate:	1-50 Hz

### OUTPUT PARAMETERS

Tunability range	
at signal wave:	420-690 nm
at SHG of signal wave:	240-310 nm
at idler wave:	730-2200 nm
Average efficiency across tunability range (signal + idler) at input pulse width 15 ns:	$\geq 20\%$
Output port (after wavelength separator):	I - idler wave II - signal wave
Linewidth at 500 nm output:	0,5 nm
Maximum output diameter:	4,5 nm

**OVERALL SIZE: 450x160x148 mm**

# Automatic Optical Parametric Oscillator, Model COPO2200A



## DIMENSIONAL DRAWING

