

Litron Total Laser Capability

AURORA OPO

# The Aurora OPO Series

Tuneable sources designed for Litron's Lasers



# Broadband OPO Systems Tuneable sources designed for Litron's lasers

## The Aurora OPO



Based around BBO, the Aurora is a broadband device pumped at 355nm. It is continuously tunable from 410nm to 680nm and the corresponding idler output to 2400nm is also available.

Designed to be fully integrated with either the Nano series or the larger LPY series of systems the OPO is a modular attachment designed specifically for use with Litron's lasers. Precise stepper motor control of the crystal and accurate optical encoding of its position ensure

accurate and repeatable wavelength tuning and output.

Conversion efficiencies of up to 30% are achieved allowing outputs of >50mJ from a compact laser and OPO combination making it ideal for either laboratory based or portable applications requiring a tunable source.

## SPECIFICATIONS

Model	Aurora 20	Aurora 35	Aurora 50
Pump energy (mJ @355nm)	75	110	180
<b>Maximum output (mJ) <sup>(2)</sup></b>	<b>20</b>	<b>35</b>	<b>50</b>
Repetition rate (Hz) <sup>(1)</sup>	10	10	10
Signal tuning range (nm)	410 - 680	410 - 680	410 - 680
Idler tuning range (nm)	740 - 2400	740 - 2400	740 - 2400
Pulse duration (ns)	~7	~7	~7
Linewidth (cm <sup>-1</sup> )	5 - 250	5 - 250	5 - 250
<b>Laser type</b>	<b>Nano LG Nano TRL</b>	<b>Nano TRL</b>	<b>Nano TRL LPY700</b>

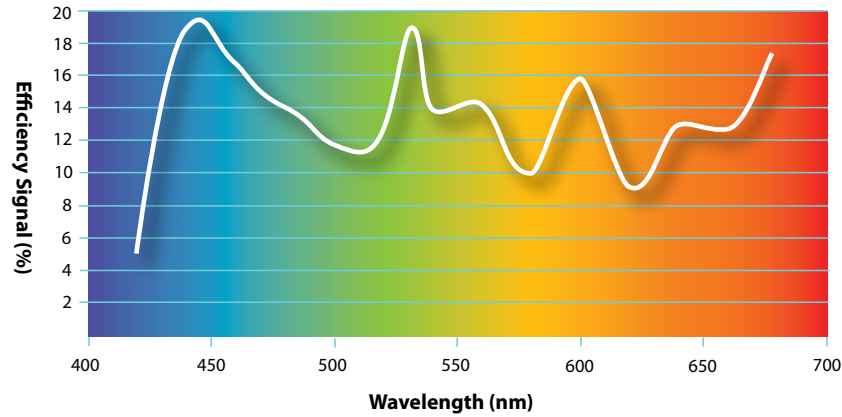
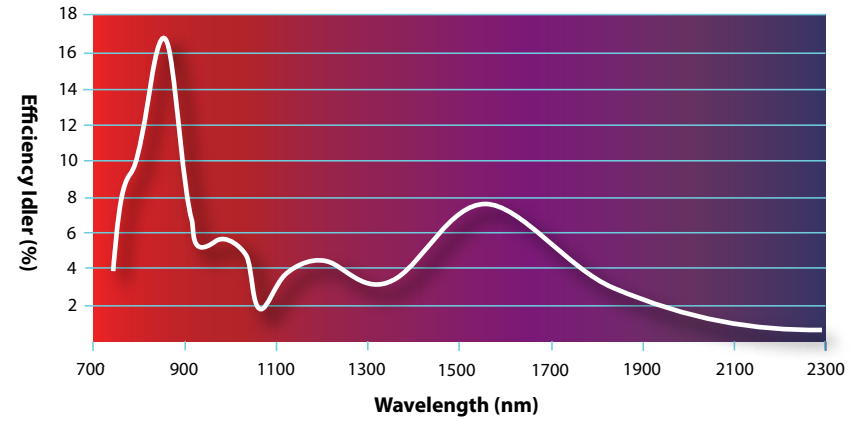
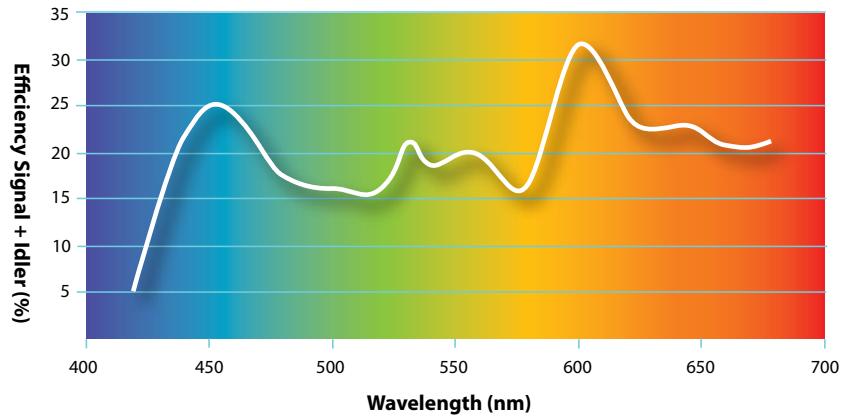
(1) Repetition rates up to 200Hz are available.

(2) Signal + Idler.



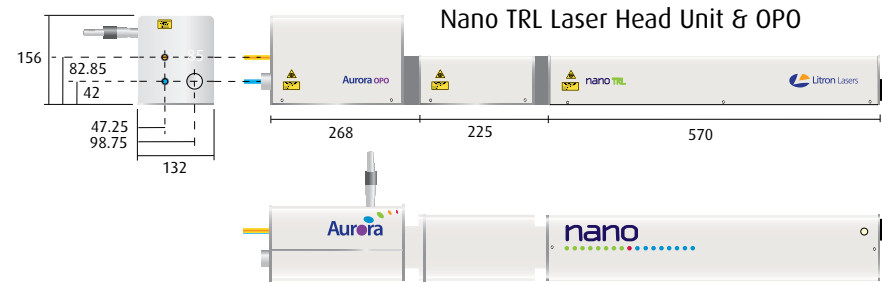
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## PERFORMANCE with 355nm pump laser

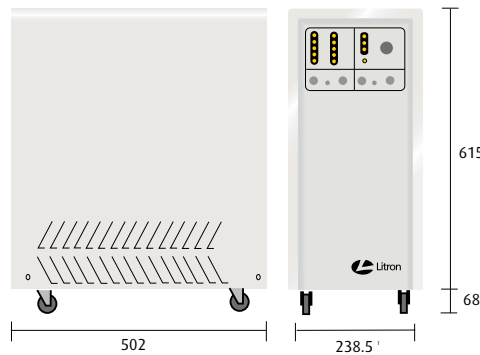


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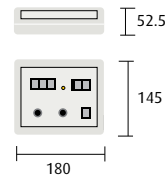
## MECHANICAL DATA



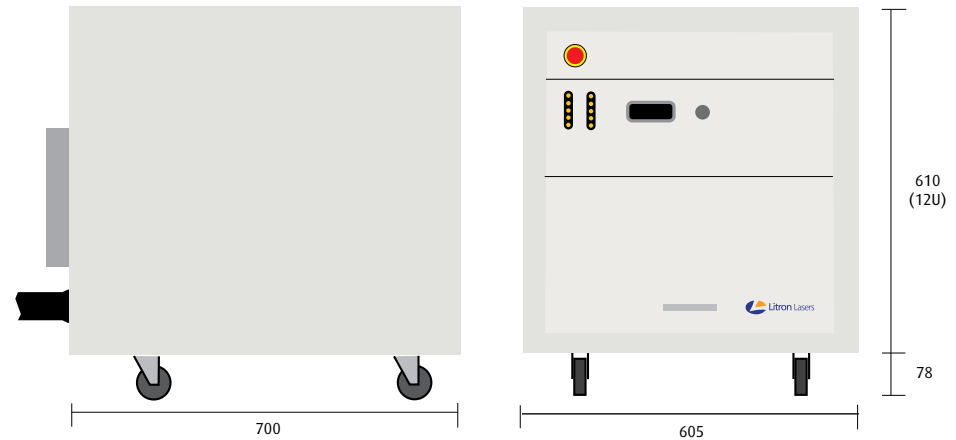
### LPU1000 PSU



### Remote Control Box



### Rack-mount PSU



All dimensions shown in mm



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Our policy is to improve the design and specification of our products. The details given in this document are not to be regarded as binding.

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