

LT-2215 OPO

Middle Band Tunable Converter

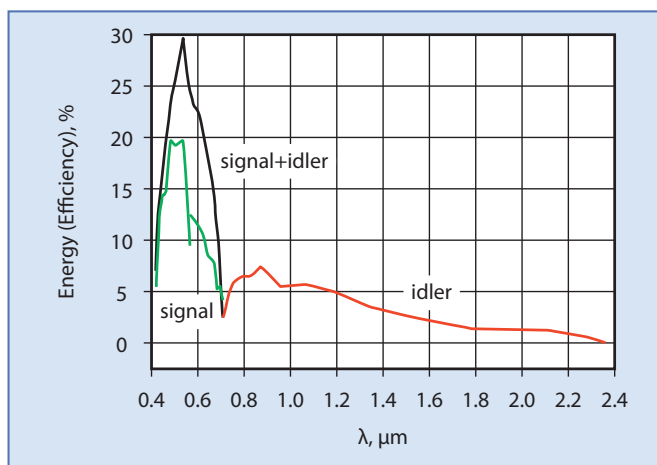


LT-2215 OPO — Type II BBO-OPO (optical parametric oscillator) combines the efficiency of LT-2214 with narrowing linewidth and smooth tuning the output wavelength without gap.

Specification

Parameter		Value
Tuning range $\Delta\lambda$, nm	at signal wave (SW) at idler wave (IW)	415–710 710–2300
Typical linewidth $\delta\lambda$, nm		$\leq 0.15^*$
Beam divergence, mrad		4–8**
Phasematching		Type II
Pump radiation conversion efficiency at maximum of tuning curve (at 10 Hz), %	at SW+IW at SW	$\leq 30^{***}$ $\leq 20^{***}$
Pulse duration (FWHM), ns		1–2 ns shorter than pump pulse duration**
Pulse repetition rate, Hz		≤ 50
Polarization at SW and IW		SW — Linear horizontal, IW — Linear vertical
Size L x W x H, mm (Weight, kg)		380 x 176 x 78 (6.5)

Efficiency of LT-2215 OPO



At pump energy $E_{355}=100$ mJ, 15 ns

Pump Laser

Wavelength, nm	355
Pulse duration, ns	6–20
Pulse energy, mJ	40–150
Repetition rate, Hz	≤ 50
Beam diameter, mm	≤ 8
Beam shape	hole free, uniform, without hot dots
Polarization	vertical

* at the 500 nm, depending on pump laser

** determined by the pump pulse duration and generated λ

*** typically for pump energy >70 mJ

