

RADIANTIS OPIUM AUTO

Automated Broadly Tunable Femtosecond Optical Parametric Oscillators with Selectable Pulse Duration



A New Generation:
Patent-Pending Ultrafast Optical Parametric Oscillators that offer, for the first time, Room-Temperature Operation, Reduced Pulse Broadening and Continuous Tuning throughout the UV, Visible and IR





Wide tunability
in the Visible and
UV spectrum

RADIANTIS OPIUM AUTO

Empower your research using simultaneous UV, VISIBLE and IR near-transform-limited femtosecond pulses, with the synchronously-pumped Optical Parametric Oscillator: OPIUM AUTO.

OPIUM AUTO is a novel broadly tunable femtosecond Optical Parametric Oscillator designed for maximum wavelength and pulse duration flexibility. Gap-free tuning across the UV, Visible and IR (340–2500 nm) is provided via the use of 4 dedicated output ports. No modifications to the layout or optics changes are required to access the complete wavelength range. In addition, simultaneous beams are continuously generated in the Visible (490–750 nm) and IR (930–2500 nm) with high power levels.

Near-transform-limited pulses are provided. The dedicated dispersion compensation module allows selection of pulse duration, enhancing functionality for multiple time-resolved applications.

PC-controlled operation simplifies tuning and stabilizes the wavelength. OPIUM AUTO offers active wavelength stabilization and wavelength tracking features. An integrated spectrometer is included that ensures high stability and insensitivity to environmental drifts.

Specifications	Pumped by Mai Tai HP**	Pumped by Mira+Verdi10*
TUNING RANGE [nm]		
SHG	345–520	350–450
Signal (Simultaneous with Idler)	490–750	490–750
Depleted Fundamental	690–1040	700–900
Idler (Simultaneous with Signal)	930–2500	930–2500
AVERAGE OUTPUT POWER [mW]		
SHG @400 nm	1100	850
Signal @550 nm	350	180
Depleted Fundamental @800nm	1100	850
Idler	170 @1300 nm	120 @1056 nm
TYPICAL PULSE DURATION [fs]		
SHG	<140	<180
Signal	100–250 (adjustable)	100–300 (adjustable)
Depleted Fundamental	<140	<180
Idler	80–250 (adjustable)	80–300 (adjustable)
Spatial Mode		TEM ₀₀

*Pumped by Mira+Verdi10 working at 1.8W, 140 fs @810nm

**Pumped by Mai Tai HP working at 2.8 W, 95 fs @820nm



www.radiantis.com

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Parc Mediterrani de la Tecnologia. Avda. Canal Olímpic, s/n
08860 Castelldefels. Barcelona. SPAIN
eMail: info@radiantis.com. Phone: +34 934 13 41 67