MixxWave

By Oxxius

Product range	Wavelength Combiners (L4Cc & L6Cc)
Product name	MixxWave CW & Modulated Laser Wavelength Combiner
Description 	The Oxxius MixxWave is a laser wavelength combiner that merges multiple laser sources — from 375 nm to 1064 nm — into a single, precisely aligned output beam. Designed for advanced multi-wavelength applications in flow cytometry, confocal microscopy and nanoparticle characterization, the MixxWave combines Oxxius or third-party laser sources into one compact, thermally stable platform. Available in two configurations, the L4Cc (up to 4 lasers) and the L6Cc (up to 6 lasers), it delivers CW and modulated outputs in free space or via optical fiber, with full instrument control through standalone software. **Key features** • L4Cc: up to 4 lasers, 2 AOMs • L6Cc: up to 6 lasers, 2 AOMs • Combines 375–1064 nm wavelengths • Up to 4 fiber or free-space outputs • Integrated electro-mechanical shutters on each port • Extension modules for port switching, power split, or AOTF modulation

General Specifications

Power stability (baseplate temperature +/− 3K)	
Free space	±1 % p-to-p
PM + SM fiber coupled	±2 % p-to-p
Modulation	
Analog (0 - 5 V)	DC - 1 MHz
Rising time using digital modulation (TTL)	≤ 2 ns (LBX) / ≤ 150 ns (LCX with AOM)
Power extinction ratio	Infinite (LBX) / ≥ 40 dB (LCX with AOM)
System specifications	
Operating temperature	15°C to 40°C at baseplate
Supply voltage, standard Plug and Play version	100 - 240 V AC
Supply voltage, OEM version	24 V DC
Warm-up time	30 minutes
Communication interfaces	USB, Ethernet, dedicated electrical interface
Software	Full access from µManager, dedicated Oxxius software
Typical weight	L4Cc: 7 to 9 kg L6Cc: 10 to 12 kg
Warranty	24 months

Available Options

Single-mode fiber coupling
Multimode fiber coupling
Heat management
Broadband beam splitter
1:2 High rate switch
1:2 Beam switch
Controlled optical density
Multi-channel modulation

Oxxius has a policy of continuous product improvement. Specifications may change without notice.