MixxWave
By Oxxius

Gamme	Wavelength Combiners
Title	MixxWave with Single Frequency lasers
Description	The MixxWave is a laser combiner that merges several laser sources into a single, precisely aligned output for advanced multi-wavelength applications. Available in two versions (L4Cc – up to 4 lasers and L6Cc – up to 6 lasers), it integrates wavelengths from 375 to 1064 nm from Oxxius or third-party laser sources, with outputs in free space or via optical fibers. Its compact, thermally stable design ensures reliability, easy maintenance, and full 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

Option 1	Single-mode fiber coupling
Option 2	Multimode fiber coupling
Option 3	Heat management
Option 4	Broadband beam splitter
Option 5	1:2 High rate switch
Option 6	1:3 High rate switch
Option 7	1:2 Beam switch
Option 8	Controlled optical density
Option 9	Multi-channel modulation