Integrated Optics, UAB
Company code: 302833442
VAT No: LT100007179012
https://integratedoptics.com
info@integratedoptics.com

PART NUMBER 40A-48A-56B-64A-25
ITEM NAME MULTI-WAVELENGTH LASER

PRODUCT DATASHEET

DESCRIPTION

Preliminary
ARA is a 4 laser combiner having 4 ultra compact Matchbox lasers integrated inside.
Integrated Multi-Color Laser Source provides multiple wavelengths in a single and compact unit. It supplies up to four wavelengths standard for use in Life Sciences, Food, Metrology and Medical applications. The ARA unit combines wavelengths into a single-mode polarization maintaining output fiber. An easy to use PC interface allows full control over the individual wavelengths.

Features:
- Four wavelengths
- Plug-and-play
- Photonic IC based beam combiner
- Single user interface for all 4 lasers

Advantages:
- Space saving design
- No optics realignment
- Immune to thermal shocks
- Remote PC control
- Vibration-proof

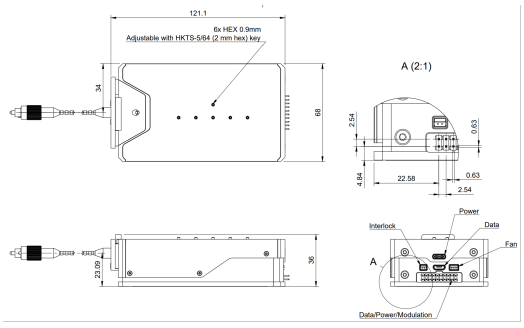
Applications:
- Confocal and Fluorescence Microscopy:
FLIM
FRAP
FLIP
FRET
- Flow cytometry
- Food sorting and quality

SPECIFICATIONS

Specifications updated: *18 March 2024*

Parameter	Minimum Value	Typical Value	Maximum Value
Output power, mW	-	405 nm - 40 488 nm - 20 561 nm - 20 638 nm - 40	-
Power stability, % (RMS, 8 hrs) from 15°C to 35°C	-	1	-
System Modulation Frequency	-	1 kHz	-
Power stability, % (RMS, 8 hrs)	-	0.2	-
Polarization extinction ratio (from PM fiber), dB	-	>20 dB	-
Max. Polarization rotation	-	+/-3 nm	-
Max. Polarization rotation	-	+/-4 deg	-
Wavelength tolerance, nm	-	+/-3 nm	-
Intensity noise, % (RMS, 20 Hz to 20 MHz)	-	405 nm - <1 488 nm - <1 561 nm - N/A 638 nm - <1 [1]	-

DRAWING



Individual Laser Modulation Frequency	-	405 nm - 10 MHz 488 nm - 10 MHz 561 nm - 1 kHz 638 nm - 10 MHz<	-

[1] Noise level is measured with a fast photodiode connected to an oscilloscope. The overall system bandwidth is from 2 kHz to 20 MHz.

Note: Product specifications are subject to change without prior notice to improve reliability, function or design or otherwise.