



PART NUMBER 40A-48A-XXY-XXY-14
 ITEM NAME MULTI-WAVELENGTH LASER; MM FIBER (405 NM, 488 NM)

PRODUCT DATASHEET



DESCRIPTION

Multi-wavelength laser featuring two laser diodes integrated within an ultra-compact MM (multi-mode) fiber-coupled 'Matchbox' housing. A classical dichroic mirror combining technique is used in combination with our proprietary micro-optics assembly to make this system both economical and compact. All optics and electronics are fitted into 'Matchbox' housing. This particular configuration combines wavelengths, which are standard for use in Life Sciences, Food sorting, Metrology, and Medical applications. An easy-to-use PC interface and separate TTL inputs allow full control over the individual wavelengths.

Features:

- Two wavelengths
- Plug-and-play
- Single user interface for both wavelengths

Advantages:

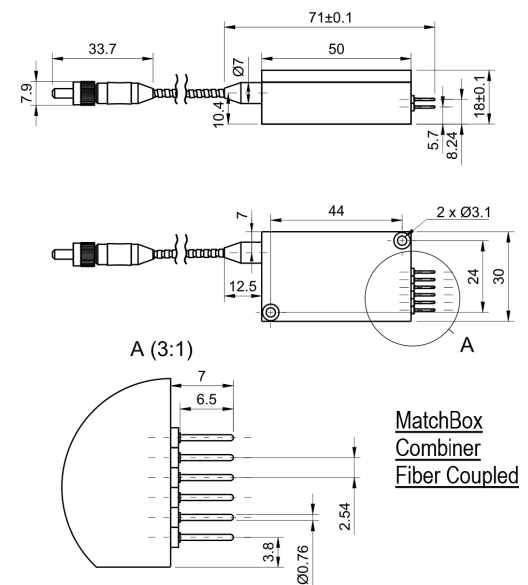
- Space-saving design
- No optics realignment
- Remote PC control

SPECIFICATIONS

Specifications updated: 25 April 2022

Parameter	Minimum Value	Typical Value	Maximum Value
Output power, mW	-	405 nm - 100 488 nm - 40	-
Wavelength Tolerance	-	+/-3 nm	-
Power stability, % (RMS, 8 hrs)	-	0.2	-
Longitudinal Modes	-	Multiple	-
Spectral line width FWHM, nm	-	<1.5	-
Transversal Mode	-	TEM00	-
Control Interface	-	UART ¹	-
Operation Mode	-	ACC (CW)	-
Input voltage, VDC	-	9	12
External Power Supply Requirement, V	-	+9 V DC, 1.5 A 2	+12 V DC, 1.5 A
External Power Supply Requirement	-	External Power Supply Requirement	-
Intensity noise, % (RMS, 20 Hz to 20 MHz)	-	<1 ³	-
Dimensions, mm	-	50 x 30 x 18	-
Beam height from the base, mm	-	10.4	-
Heat-sinking requirement, °C/W	-	<0.5	-
Optimum heatsink temperature, °C	-	20	-

DRAWING



Warm-up Time (Cold Start)	-	< 1 min	-
Temperature Stabilization	-	Internal TEC	-
Overheat Protection	-	Yes	-
Storage temperature, °C (non-condensing)	-	-	-
Net weight, kg	-	0.3	-
Max. power consumption, W	-	2	-
Warranty, months (op. hrs)	-	14 (10000) ⁴	-
RoHS	-	Yes	-
CE Compliance	-	- General Product Safety Directive (GPSD) 2001/95/EC - (EMC) Directive 2004/108/EC	-
OEM Lasers Are Not Compliant With	-	IEC60825-1:2014	-

¹ The break-out-box AM-C9 can be used for conversion of UART communication to USB.

² If the break-out-box AM-C9 is used, a PD (Power Delivery) type of power supply can be used.

³ Noise level is measured with a fast photodiode connected to an oscilloscope. The overall system bandwidth is from 2 kHz to 20 MHz.

⁴ Whichever occurs first.

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