

# ACOUSTO-OPTIC MODULATOR

1030-1064 nm

## PRODUCT DATASHEET

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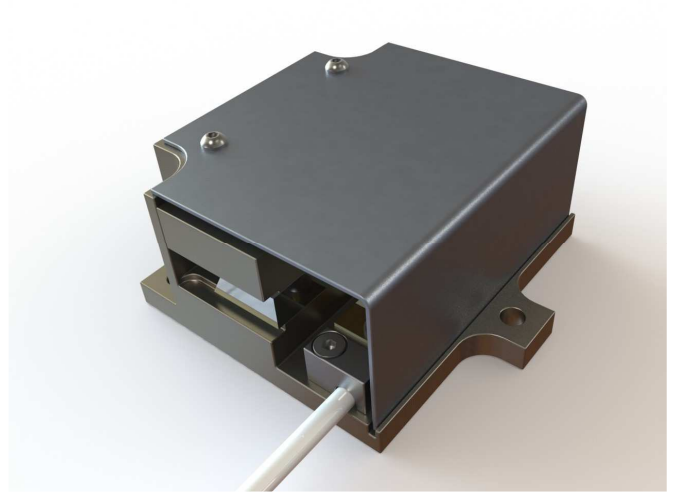
An acousto-optic modulator for use in the 1030-1064 nm wavelength range, ideal for extra-cavity modulation, power control or stabilisation of high power picosecond or nanosecond solid state lasers.

Manufactured in crystal quartz for improved thermal management and high damage threshold, this modulator combines high quality optical finishing with high grade anti-reflection coatings to maintain superior beam quality and high optical throughput.

In addition to the specifications indicated, we also offer alternative wavelengths, RF frequencies, active apertures and a wide range of custom housing configurations. We also offer full custom design & manufacturing, enabling our customers to achieve the perfect solution.

Our scientists and engineers are available to assist in selecting the most appropriate acousto-optic device and RF driver for your application.

Please contact our sales team for further information.



### Key Features

- Crystal quartz
- 1030-1064 nm
- High damage threshold
- 41 MHz

### Applications:

- Industrial (material processing)
  - Pulse picking
  - Laser intensity control

I-M041-2.5C10G-4-GH50

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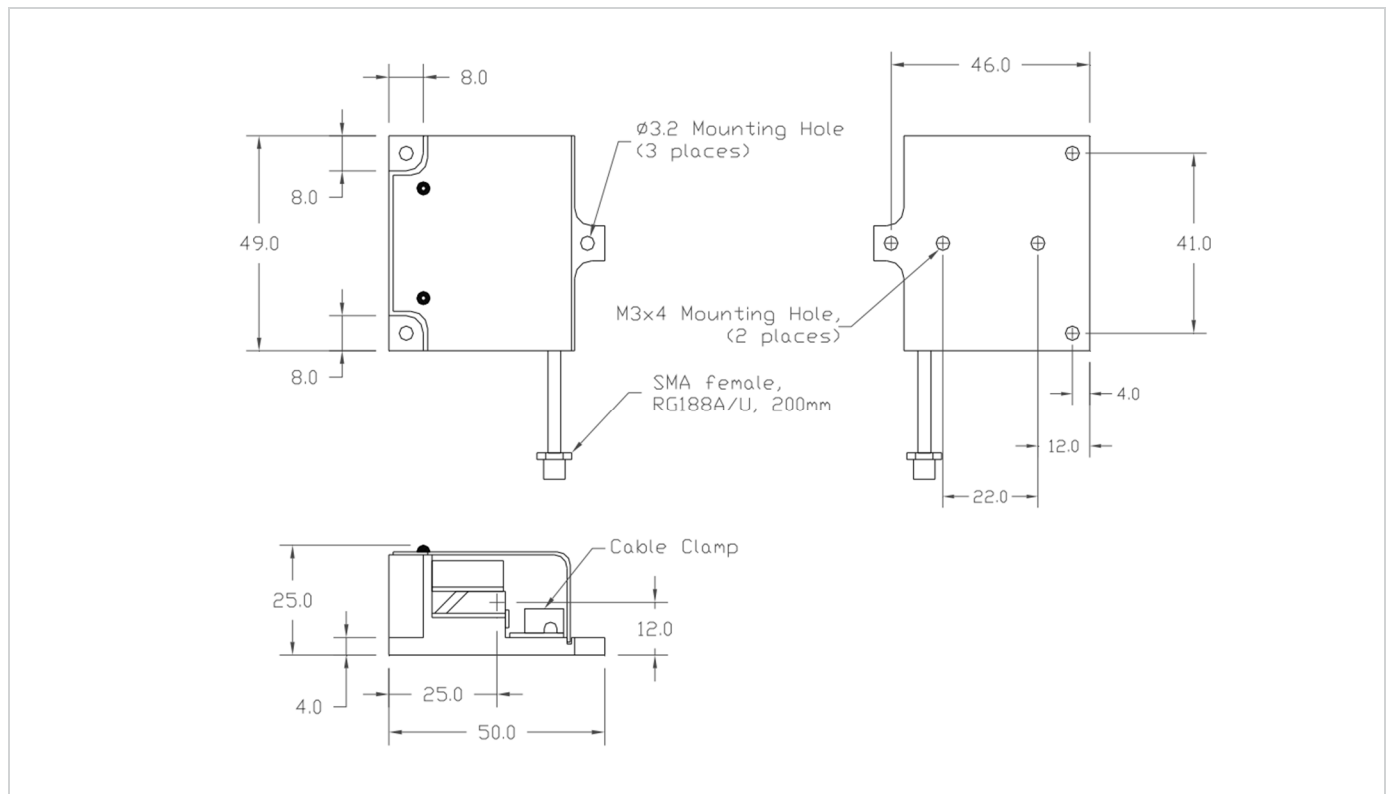
Datasheet ref: IWDS026/Revision no 1.2

As part of our policy of continuous product improvement, we reserve the right to change specifications at any time.

## General Specifications

Model No:	I-M041-2.5C10G-4-GH50
Device:	AO modulator
Interaction material:	Crystal quartz
Wavelength:	1030-1064nm
Damage threshold:	> 1 GW/cm <sup>2</sup>
AR coating reflectivity:	< 0.3% per surface
Transmission:	> 99.4%
Frequency:	40.68 MHz
Optical polarisation:	Linear, vertical to base
Active aperture:	2.5 mm
Acoustic mode:	Compressional
Separation angle:	7.6 mrad
Rise time (10-90%):	113ns/mm
Diffraction efficiency:	≥ 85%
Maximum RF power:	20 W
Cooling:	Conduction

## Device Schematic



### ACOUSTO-OPTIC MODULATOR - I-M041-2.5C10G-4-GH50

## Ordering Information

Explanation: I-M041-2.5C10G-4-GH50 (Modulator, 41 MHz, 2.5 mm active aperture, compressional mode, crystal quartz, 1030-1064 nm, SMA female pigtail, GH50 housing).

Order code

			①	①		②	②	②	③	④	④										
I	M	0	4	1	-	2	.	5	C	1	0	G	-	4	-	G	H	5	0		