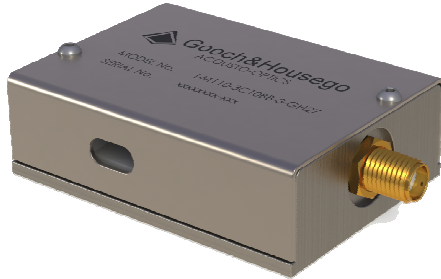


# Gooch & Housego



## 300 – 400nm Acousto-Optic Modulator

I-M110-3C10BB-3-GH27

An acousto-optic modulator for use in the 300 – 400nm wavelength range, ideal for frequency tripled Nd:YAG and Nd:YVO<sub>4</sub> lasers, or 351 / 364nm Argon lasers.

Manufactured in Crystal Quartz for improved thermal management and efficiency. 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 & 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
- ☐ 300 – 400nm
- ☐ High damage threshold
- ☐ 110MHz

### Applications:

- ☐ Industrial (material processing):
  - Micromachining
  - Lithography
  - Patterning

## General Specifications

Interaction material:	Crystal Quartz
Wavelength:	300 - 400nm
Optical polarisation:	Linear, vertical to base
AR coating reflectivity:	< 0.5% per surface (< 0.3% at 355nm)
Damage threshold:	> 500MW/cm <sup>2</sup> (pulsed)
Transmission (single pass):	> 99.0%
RF frequency:	110MHz
VSWR:	< 1.2:1
Active aperture:	3.0mm
Acoustic mode:	Compressional
Rise-time:	113ns/mm
Separation angle:	6.8mrad at 355nm
Diffraction Efficiency:	> 85%
RF power:	< 3W

## Ordering Code

**Explanation:** I-M110-3C10BB-3-GH27 (Modulator, 110MHz, 3.0mm active aperture, compressional mode, Crystal Quartz, 300 - 400nm, SMA male bulkhead, GH27 housing).

I	-	M	1	1	0	-	3	C	1	0	B	B	-	3	-	G	H	2	7
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