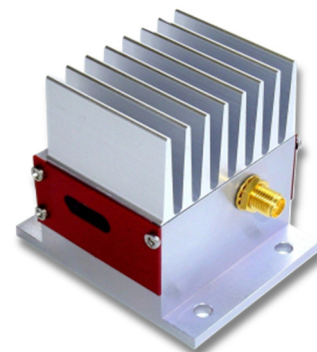


Product Overview

These modulators have been specially designed for applications where TeO2 cannot be used. Thanks to the large aperture, in most cases the modulator can be used without additional optics. They cover the UV range up to the lower VIS. Suitable for DPSS 355 nm or UV AR + lasers.

Main application not only intensity modulation but also fixed frequency shifters or variable frequency shifter in the range up to 110 +/- 15 MHz.

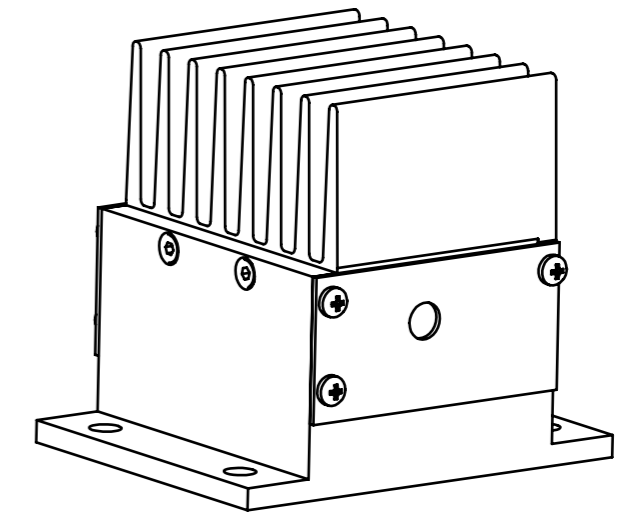
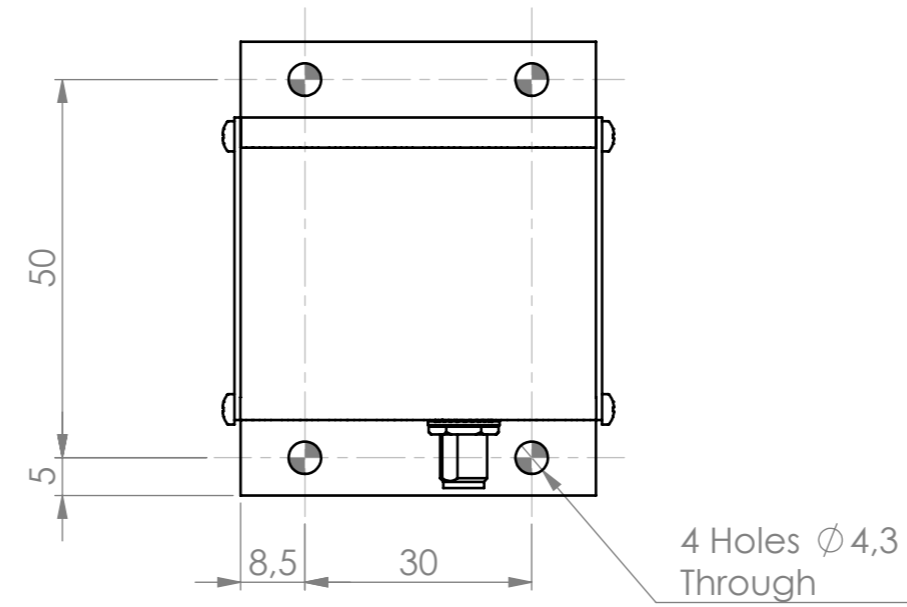
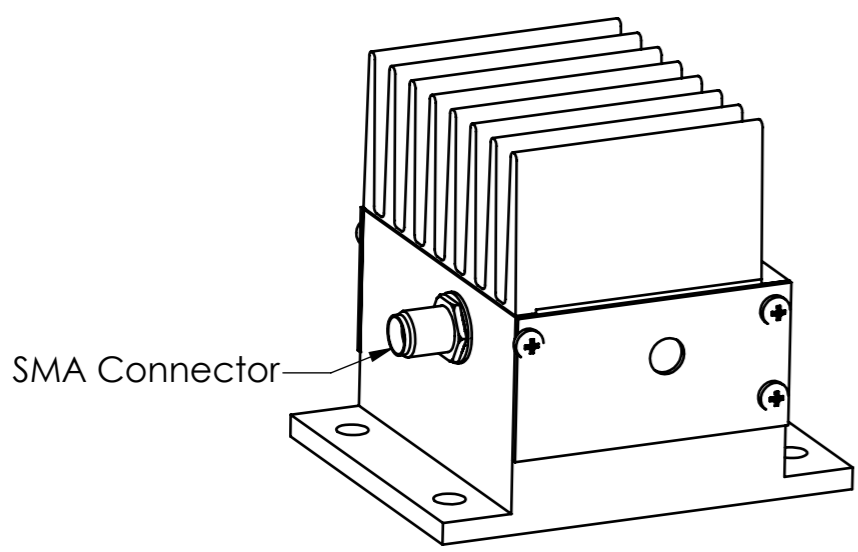
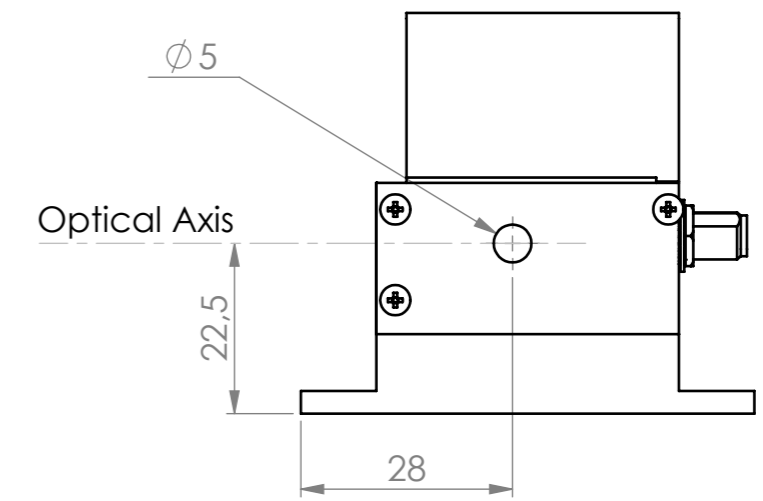
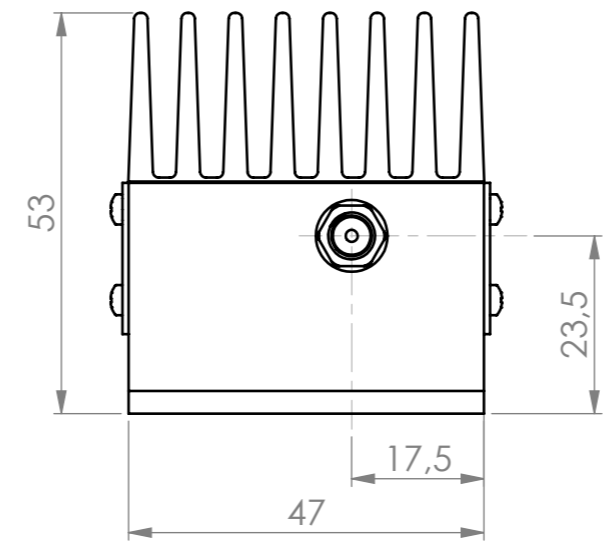
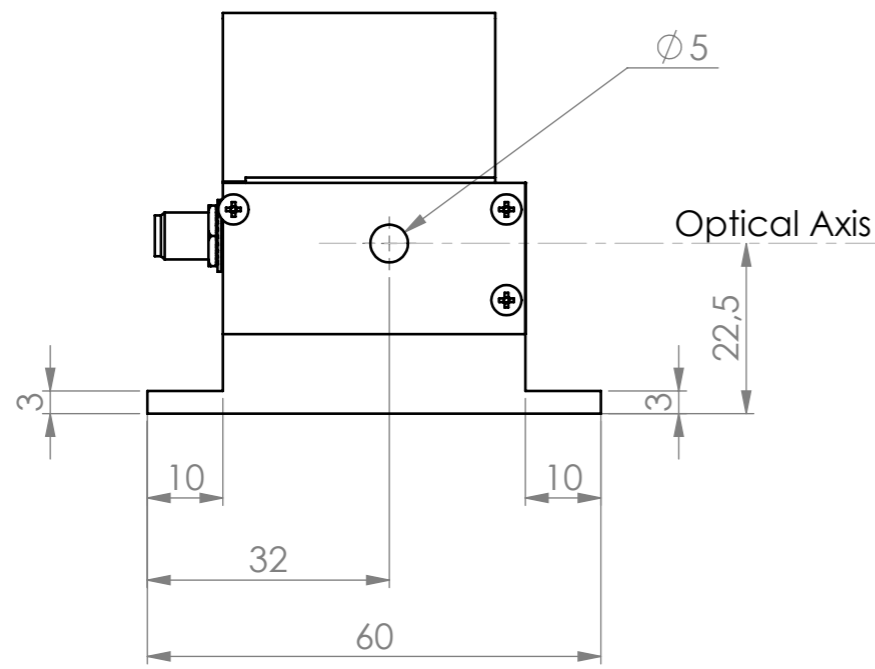



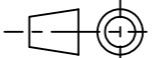
Features

- High laser power
- Linear polarization
- Large aperture
- High diffraction efficiency

	Units	Min	Nom	Max
Material-Acoustic mode-Velocity		Fused Silica [L] – 5960 m/s		
Optical Wavelength range (AR coated) (λ)	nm	325	355	425
Carrier Frequency / Frequency shift	MHz	+/-110		
Transmission	%	95	98	
Input / Output Polarization with ref to baseplate		Linear vertical		
Active Aperture	mm ²	3 x 3		
Beam diameter (1/e ²)(ϕ)	mm	0.5	1.5	2.5
Rise/fall time (T _r)	ns	55	165	275
Analog Amplitude Modulation Bandwidth (-3dB) (F _{-3dB})	MHz			8
Separation Angle (0-1)	mrd	6	6.6	7.8
Static Extinction Ratio	dB	30		
* Diffraction Efficiency (η)	%	85	90	
Optical power density	W/mm ²		10	
Input impedance	Ω		50	
V.S.W.R.			< 1.2:1	
RF Power (P)	W			4
Connector		SMA female		
Size	mm ³	47 x 60 x 53		
Weight	g		100	
Packaging		IN PRO 93		
Operating Temperature (non condensing)	°C	+10	+25	+40
Storage Temperature (non condensing)	°C	-40		+65
RoHS Compliance		Yes		
OPTION MQ110-B30A3-UV		Frequency range 110+/-15MHz, Scan angle 1.8mrd @355 nm, Efficiency >70% over full range		

$$T_r = 0.66 \frac{\phi}{v} * F_{-3dB} = \frac{0.48}{T_r} * \Delta\theta = \frac{\lambda F}{v} * \frac{P_1}{P_2} = \frac{\lambda_1}{\lambda_2}$$



B	09/01/18	G.M	Ajout de l'indication manquante Ø5		
A	29/09/17	G.M	Plan initial / Initial Drawing		
Indice Index	Date	Auteur Author	Modifications		
Conception Design	G.M	PLAN D'INTERFACE / OUTLINE DRAWING		 A.A. SA OPTO-ELECTRONIC DIVISION 18, rue Nicolas Appert F-91898 ORSAY tel : 08 11 09 76 76 fax : 01 76 91 50 31	
Vérification Checking	G.M				
Tolérance Tolerance	ISO 2768mK	Référence / Reference			
Echelle Scale	1:1	IN-PRO-376			
		Format A3	Ce document est la propriété de A.A.SA. Il est strictement interdit de reproduire ce document ou une partie sans l'autorisation de A.A.SA. This document is the property of A.A.SA. It is strictly prohibited to reproduce this document or a part without the authorization of A.A.SA.		
		Folio / Sheet	1/1	Indice / Index	B