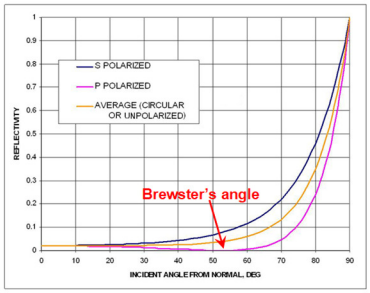
MQ200-A1,5-244.266-Br

AO MODULATOR/SHIFTER

Product Overview

These modulators have been specially designed for applications where TeO2 cannot be used. They are made of fused Silica UV grade with Brewster incidence and can operate in the range of 244-266 nm.

Some examples of applications can be amplitude modulation, pulse picking or fixed frequency shifting at 200MHz.



Features

- High laser power
- Linear polarization
- High diffraction efficiency

	Units	Min	Nom	Max
Material-Acoustic mode-Velocity		*Fused Silica [L] – 5960 m/s*		
Optical Wavelength range (AR coated) (λ)	nm	*244*		*266*
Carrier Frequency / Frequency shift	MHz		*+/-200*	
Transmission	%		*Brewster's Incidence*	
Input / Output Polarization with ref to baseplate			*Linear parallel / Linear parallel*	
Active Aperture	mm²		*1.5 x 2*	
Beam diameter ($1/e^2$)(ϕ)	mm	*0.3*		*1.25*
Rise/fall time (T_r)	ns	*33*		*138*
Analog Amplitude Modulation Bandwidth (-3dB) (F_{-3dB})	MHz			*14.5*
Separation Angle (0-1)	mrd	*8.1*		*8.9*
Static Extinction Ratio	dB	*30*		
* Diffraction Efficiency (η)	%		*85*	
Max optical power density	W/mm²	*5*		
Input impedance	Ω		*50*	
V.S.W.R.			*< 1.2:1*	
RF Power (P)	W			*4*
Connector			*SMA female*	
Size	mm³		*59.1 x 33.6 x 42.4*	
Weight	g		*60*	
Packaging			*IN PRO 082*	
Operating Temperature (non condensing)	℃	*+10*	*+25*	*+40*
Storage Temperature (non condensing)	℃	*-40*		*+65*
RoHS Compliance			*Yes*	
OPTION MQ200-B30A1.5-244.266-Br		*Frequency range 200+/-15MHz, Scan angle 1.3mrd @266nm, Efficiency >75% @355nm over full range*		

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

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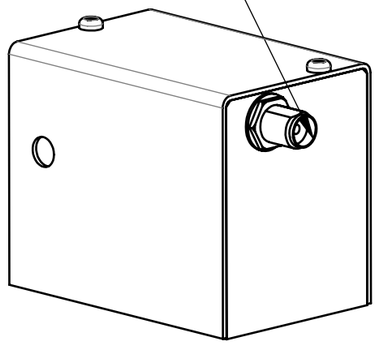
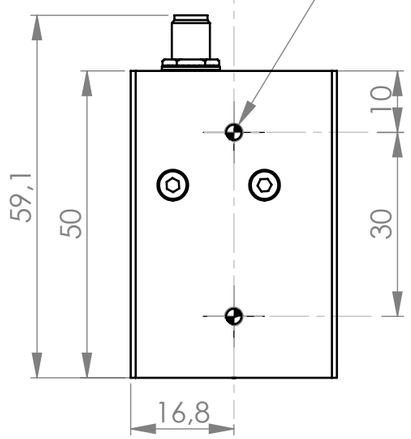
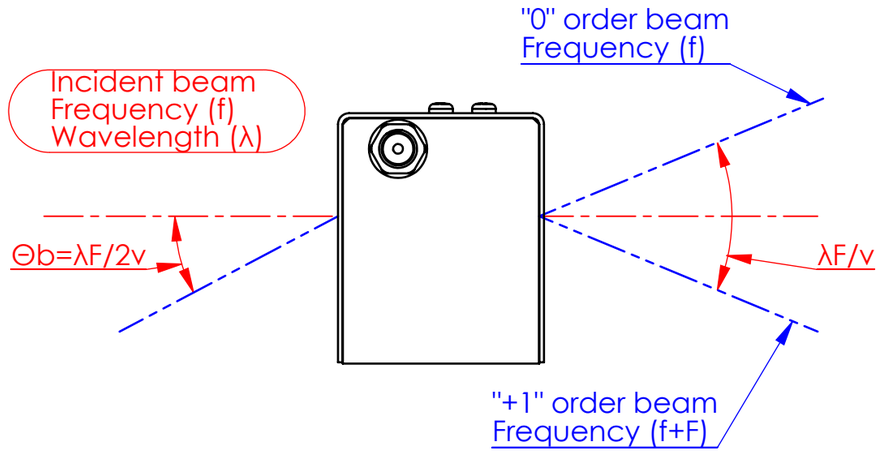
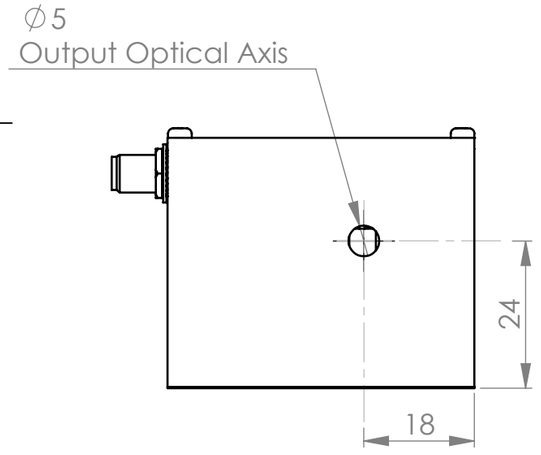
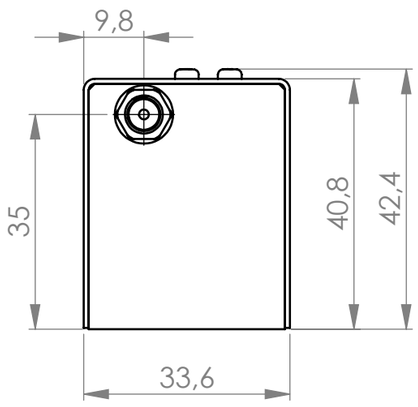
SMA Connector

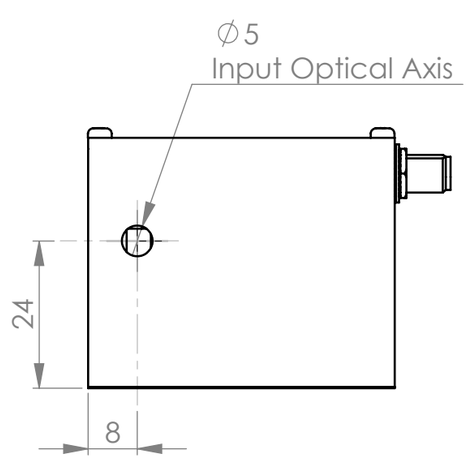


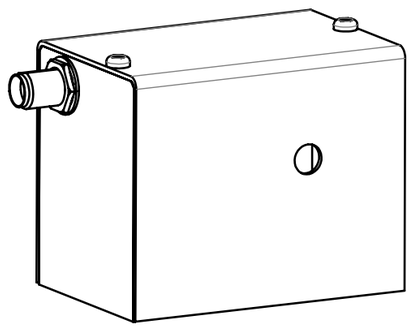












Indice Index	Date	Auteur Author	Modifications
C	26/07/11	G.M	Ajout axe optique.
B	29/01/07	E.D	Mise en page
A	14/01/05	O.G	Plan initial / Initial Drawing

Conception Design	E.D
Vérification Checking	L.F
Tolérance Tolerance	ISO 2768mK
Echelle Scale	1:1
Format	A3

PLAN D'INTERFACE / OUTLINE DRAWING

Référence / Reference

IN-PRO-082

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