

Product Overview

This modulator has been specially designed for high power and fast rise time application. They can be used as intensity/amplitude modulation as well as frequency shifters at 180MHz.



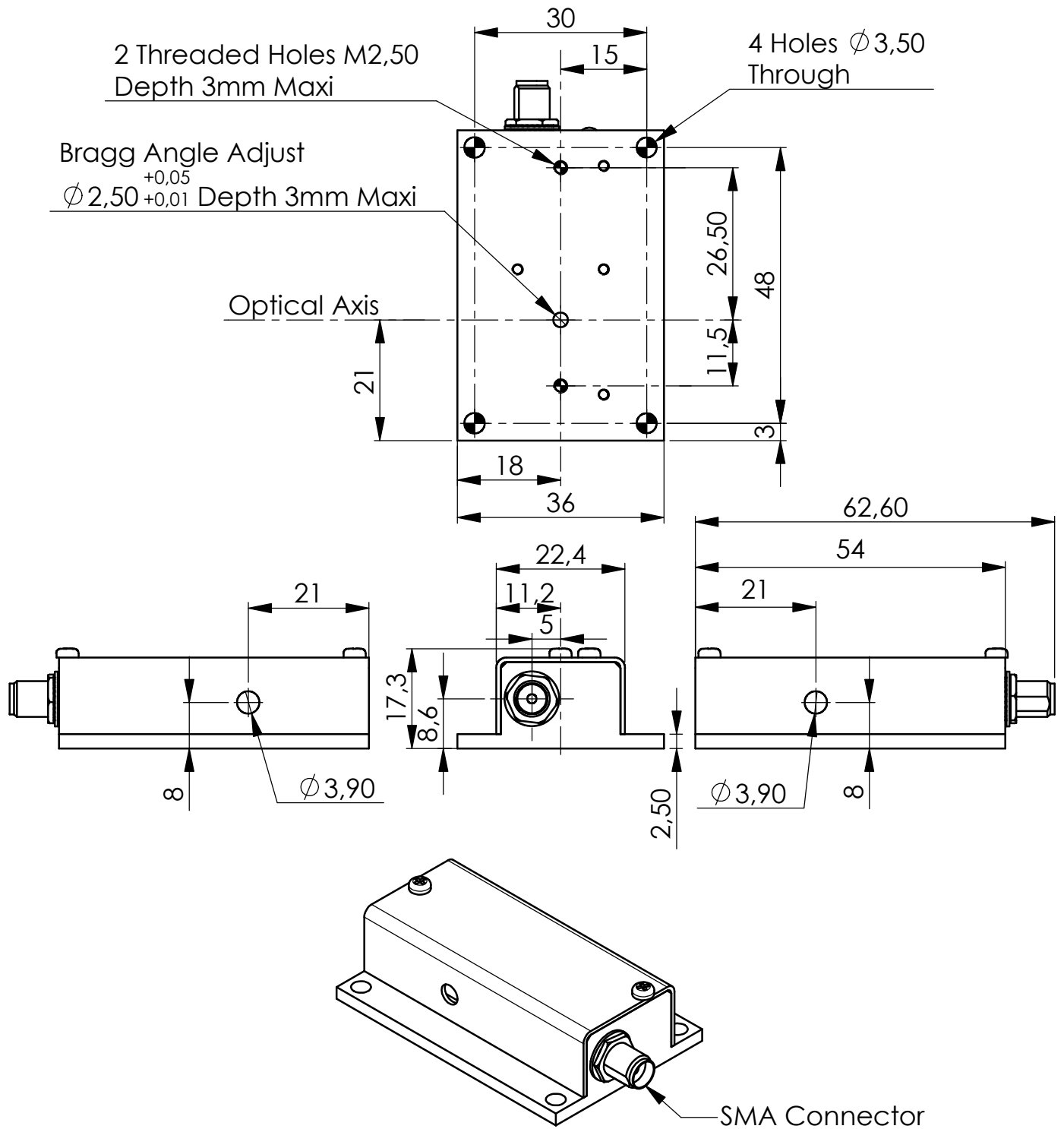
Features

- Small rise time
- High optical power
- Linear polarization

	Units	Min	Nom	Max
Material-Acoustic mode-Velocity		Fused Silica [L] – 5960 m/s		
Optical Wavelength range (AR coated) (λ)	nm	440	-	670
Carrier Frequency / Frequency shift	MHz	+/-180		
Transmission	%	95	98	
Input / Output Polarization with ref to baseplate		Linear vertical		
Active Aperture	mm ²	0.25 x 1		
Beam diameter (1/e ²)(ϕ)	μ m	90		200
Rise/fall time (T_r)	ns	9.9		22
Analog Amplitude Modulation Bandwidth (-3dB) (F_{-3dB})	MHz			48
Separation Angle (0-1)	mrd	13		20
Static Extinction Ratio	dB	30		
*Diffraction Efficiency (η)	%		85	
Optical power density	W/mm ²	100		
Input impedance	Ω		50	
V.S.W.R.			< 1.2:1	
RF Power (P)	W			4
Connector		SMA female		
Size	mm ³	62.6 x 36 x 17.3		
Weight	g		65	
Packaging		IN PRO 136		
Operating Temperature (non condensing)	°C	+10	+25	+40
Storage Temperature (non condensing)	°C	-40		+65
RoHS Compliance		Yes		

* Diffraction efficiency is beam diameter and wavelength dependent.

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



A	18/12/06	E.D	Plan initial / Initial Drawing
Indice Index	Date	Auteur Author	Modifications
Conception Design	E.D	PLAN D'INTERFACE / OUTLINE DRAWING	
Vérification Checking	L.F		
Tolérance Tolerance	ISO 2768mK	Référence / Reference	
Echelle Scale	1:1	IN-PRO-136	
	Format A4	Ce document est la propriété de A.A.S.A. Il est strictement interdit de reproduire ce document ou une partie sans l'autorisation de A.A.S.A. This document is the property of A.A.S.A. It is strictly prohibited to reproduce this document or a part without the authorization of A.A.S.A.	
		Folio / Sheet 1/1	Indice / Index A



OPTO-ELECTRONIC
A.A. SA OPTO-ELECTRONIQUE DIVISION
18, rue Nicolas Appert
F-91898 ORSAY
tel : 08 11 09 76 76
fax : 01 76 91 50 31