

Product Overview

These free space modulators operate at 350MHz with a possible RF range +/- 50 MHz or +/- 60 MHz. They are provided at various wavelength ranges as from 450 nm up to 950 nm. The intended application can be fast intensity modulation, pulse picking as well as frequency shifting (fixed and variable).



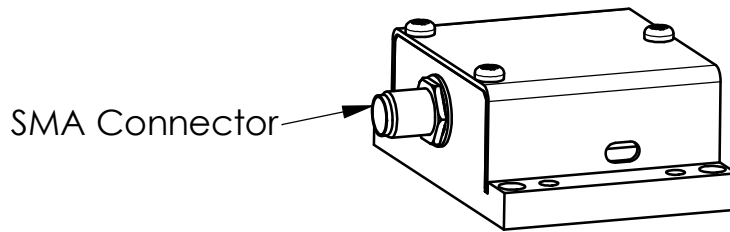
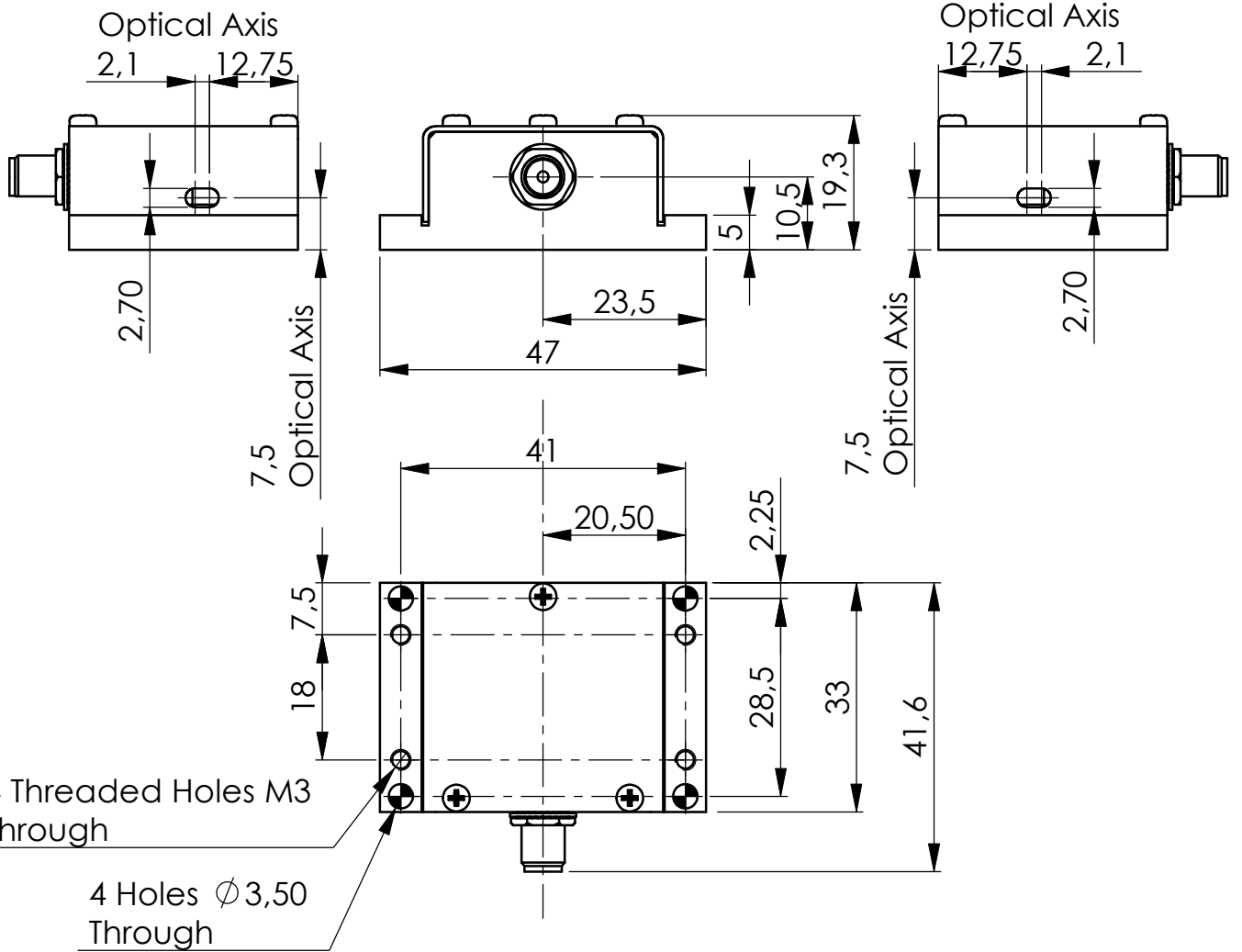
Features

- Small rise time
- High diffraction efficiency

		Units	Min	Nom	Max
Material-Acoustic mode-Velocity		m/s	TeO2 [L] – 4200		
Wavelength range	VIS	nm	450		700
	800		700		950
Carrier Frequency / Frequency shift		MHz	+/-350		
Transmission		%	95	98	
Input / Output Polarization			Linear / Linear		
Active Aperture		mm ²	0.12 x 1		
Beam diameter (1/e ²)(φ)		mm	0.04		0.08
Rise/fall time (T _r)		ns	6		13
Analog Amplitude Modulation Bandwidth (-3dB) (F _{-3dB})		MHz			80
Separation angle	VIS	mrd	37.5		58.3
	800		58.3		79.2
Static Extinction Ratio		dB	33		
*Diffraction Efficiency (η)	VIS	%	85		
	800		80		
Optical power density (CW)	VIS	W/mm ²			5
	800				10
Input impedance		Ω		50	
V.S.W.R.				< 1.2:1	
RF Power (P)	VIS/800	W			1.3
Size		mm ³	47. x 41.6 x 19.3		
Weight		g		50	
Packaging			IN PRO 002 or IN PRO 003		
Operating Temperature (non condensing)		°C	+10	+25	+40
Storage Temperature (non condensing)		°C	-20		+50
RoHS Compliance			Yes		
OPTION MT350-B100A0.12-xx or MT350-B120A0,12-xx			Frequency range 350+/-50MHz or 350 +/- 60 MHz		

*Beam diameter and wavelength dependent.

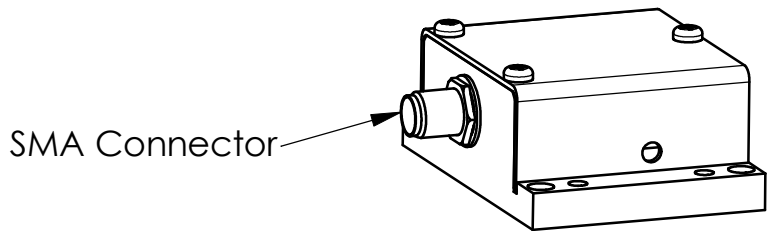
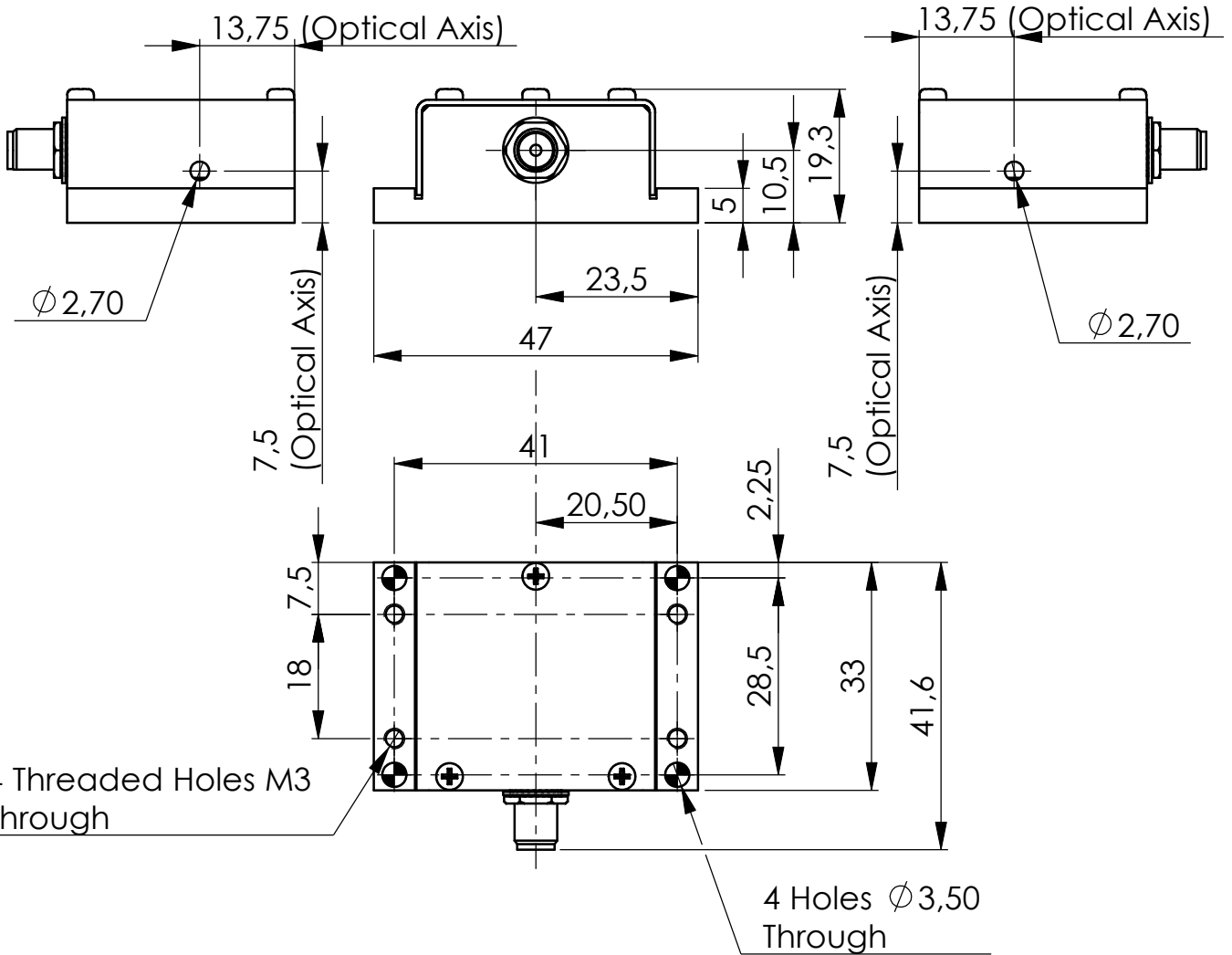
$$T_r = 0.66 \frac{\phi}{v} * F_{-3dB} = \frac{0.48}{T_r} * \Delta\theta = \frac{\lambda F}{v} * \frac{P_1}{P_2} = \frac{\lambda_1}{\lambda_2}$$



B	15/12/06	E.D	Mise en page
A	09/03/06	A.A	Plan initial / Initial drawing
Index	Date	Auteur Author	Modifications
Conception Design	E.D	PLAN D'INTERFACE / OUTLINE DRAWING	
Vérification Checking	L.F		
Tolérance Tolerance	ISO 2768mK	Référence / Reference IN-PRO-003	
Echelle Scale	1:1	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.	
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B	15/12/06	E.D	Mise en page
A	25/04/02	F.C	Plan initial / Initial Drawing
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-002	
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