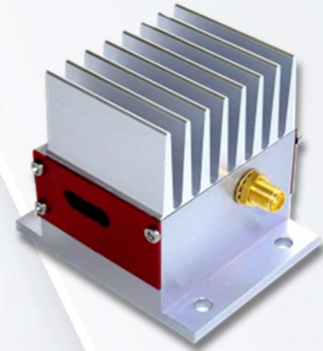


# MQ110-A3-UV

## FEATURES

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

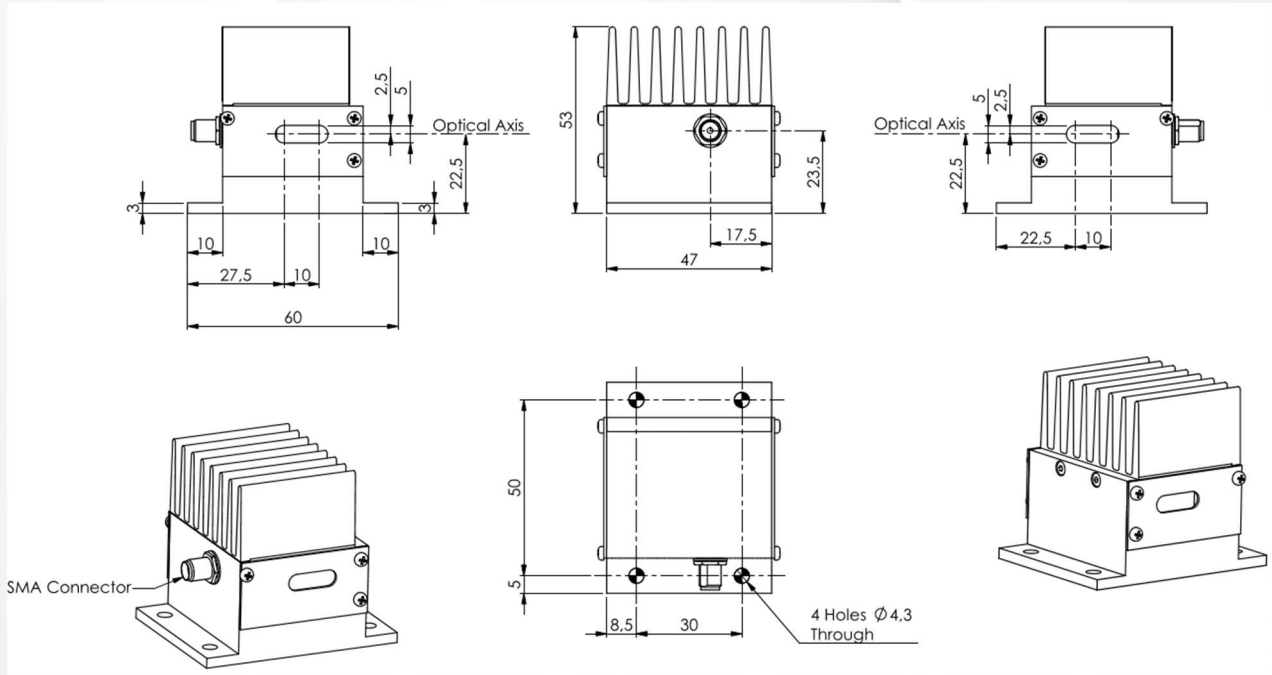


## SPECIFICATIONS (T=25°C)

PARAMETER	RATING	UNIT
Material-Acoustic mode-Velocity	TeO <sub>2</sub> -L - 5960	m/s
Optical Wavelength range (AR coated) (λ)	325-425	nm
Carrier Frequency / Frequency shift	+/-110	MHz
Transmission	≥95, nom 98	%
Input / Output Polarization	Linear Vertical	
Active Aperture	3 x 3	mm <sup>2</sup>
Rise/fall time (T <sub>r</sub> )	110	ns/mm
Analog Amplitude Modulation Bandwidth (-3dB) (F <sub>-3dB</sub> )	8 (max)	MHz
Separation Angle (0-1) (Δθ)	6.6 @355nm	mrd
Static Extinction Ratio	>33	dB
Diffraction Efficiency (η)	Nom 90	%
Max optical power density	10	W/mm <sup>2</sup>
Input impedance	50	Ω
V.S.W.R.	< 1.2:1	
RF Power (P)	4 (max)	W
Connector	SMA female	
Size	47 x 60 x 53	mm <sup>3</sup>
Weight	Nom 100	g
Packaging	IN PRO 93	
Operating Temperature (non condensing)	+10 to +40	°C
Storage Temperature (non condensing)	-40 to +65	°C
RoHS Compliance	Yes	
OPTION MQ110-B30A3-UV	Frequency range 110 +/- 15 MHz, scan angle 1.8 mrd @ 355 nm, Efficiency ≥ 70%	

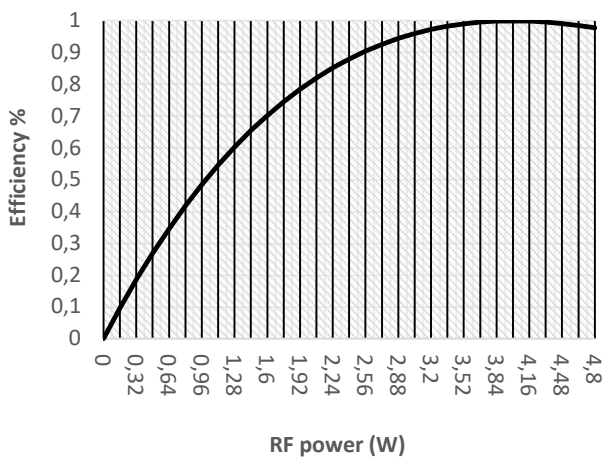
$$T_r = 0.66 \frac{\phi}{V} * F_{-3d} = \frac{0.48}{T_r} * \Delta\theta = \frac{\lambda F}{V} * \frac{P_1}{P_2} = \frac{\lambda_1}{\lambda_2}$$

**OUTLINE DRAWING, mm**



**AO BEHAVIOUR (theoretical)**

Relative Efficiency versus RF power



AOM temporal response

