

# MT65-B20A2-1064-2x

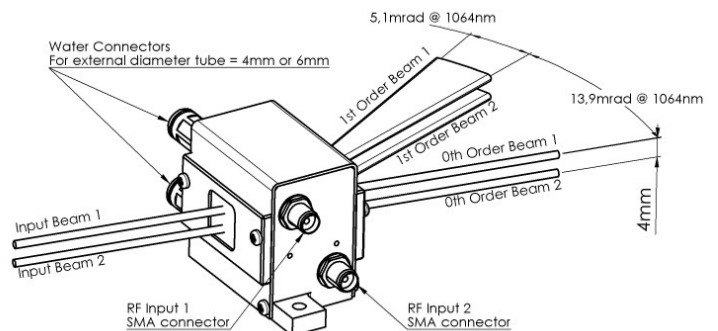
## AO Modulator – 2 channels

### Multi-channels modulator for 1064 nm lasers

- 1064 m • Linear/Random Polar
- 2 channels

These modulators have been specially designed for 1064 nm operation.

They can also be used as low resolution deflectors with a frequency range up to 20 MHz. Their 2 channels designs allow user to work with up to 2 parallel beams.



### Specifications

<b>Material-Acoustic mode</b>	TeO <sub>2</sub> [L]
<b>Number of channels</b>	2
<b>Acoustic Velocity</b>	V=4200 m/s
<b>Optical Wavelength range</b>	1064 nm
<b>Transmission</b>	98% @1064nm
<b>Optical Input / Output polarizations</b>	Linear
<b>Aperture</b>	2 x 2 mm <sup>2</sup>
<b>Centre to Centre Channels spacing</b>	4 mm
<b>Carrier frequency / Frequency shift</b>	65 +/- 10 MHz
<b>Separation angle</b>	> 13.9 mrd
<b>Scan angle</b>	5 mrd
<b>Diffraction efficiency (with TEM<sub>00</sub> beam, M<sup>2</sup> ≤ 1.1)</b>	85 % @F <sub>c</sub> , ≥ 70 % over frequency range
<b>Rise time</b>	160 ns/mm
<b>Amplitude modulation bandwidth</b>	> 3 MHz (-3 dB, @1 mm)
<b>Static extinction ratio</b>	> 2000/1
<b>Max optical power density</b>	> 10 W / mm <sup>2</sup>
<b>Input impedance</b>	Nom 50 Ω
<b>V.S.W.R.</b>	Nom < 1.5/1
<b>RF Power</b>	nom 2.2 Watts per channel
<b>RF Connectors / Size / Weight</b>	SMA / (LxH) 50.9 x 22.4 x 15.8 mm <sup>3</sup> / 50 g
<b>Heat Exchange</b>	Water cooling
<b>Operating Temperature</b>	10 to 40 °C

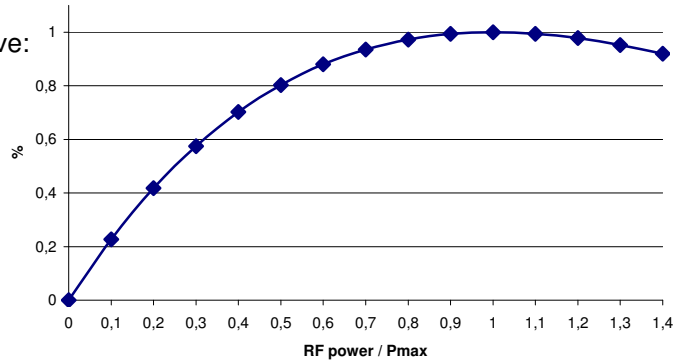


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Relative Diffraction Efficiency vs RF Power



→ Separation angle ( $\Delta\theta$ ) is wavelength ( $\lambda$ ) sensitive:

$$\Delta\theta = \frac{\lambda F}{V}$$

→ RF power (P) is wavelength ( $\lambda$ ) sensitive:

$$\frac{P_1}{P_2} = \frac{\lambda_1^2}{\lambda_2^2}$$

OPTION

Version 532 nm  
Other apertures, Other channel spacing

Outline Drawing

(sizes in mm)

