



Integrated Optical Amplitude Modulator

Waveguide-based electro-optical light modulator



The Integrated Optical Amplitude Modulator is a compact fiber-coupled electro-optical modulator that works based on MgO:LiNbO₃ and LiNbO₃ crystals. Providing fast electro-optical response, it allows amplitude modulation with frequencies as high as the Gigahertz range.

Available modulators can handle wavelengths in the visible and the infrared spectral range. Standard-designed modulators use polarization maintaining single mode fibers to couple the light in and out. They may also be configured with fiber systems or connectors of different types. Each modulator may be fitted with a control & driver unit on special request.

Benefits

- Application in the VIS or IR spectrum
- High modulation frequencies
- Single mode fiber-coupling

Applications

- Analog and digital modulation
- Short laser pulse generation
- Pulse generation in oscillator amplifier systems
- Photo finishing
- Laser Scanning Microscopy
- Metrology

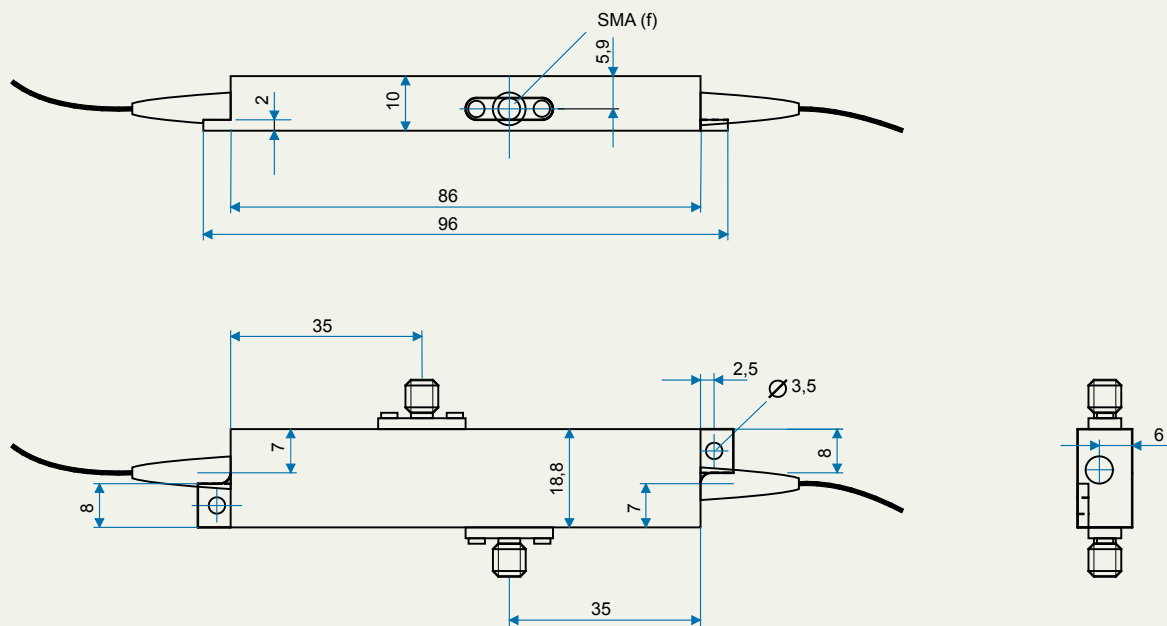
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Specifications

Wavelength [nm] Other wavelengths on request		532	635	830	1064	1300	1550
Spectral bandwidth [nm]		± 10	± 20	± 40	± 60	± 100	± 100
Insertion Loss, typical [dB]		7	7	6	5	5	5
Extinction, typical		500:1	800:1	800:1	1000:1	1000:1	1000:1
Frequency response	Standard version HF version	100 Hz ... 1 GHz 100 Hz ... 5 GHz					
Optical connection, input	Standard Fiber connector	Polarization maintaining single mode fiber Bare fiber, FC/PC connector or FC/APC connector					
Optical connection, output	Standard Optional Fiber connector	Polarization maintaining single mode fiber Single mode or multi mode fiber Bare fiber, FC/PC or FC/APC connector					
Half wave voltage	Standard version HF version	2 V	3 V	4 V	5 V	8 V	8 V
		2 V	3 V	3 V	3 V	5 V	5 V
Dimensions L x W x H (housing, without fiber feed-through)		96 mm x 19 mm x 10 mm					

Dimensions Amplitude Modulator



It is our policy to constantly improve the design and specifications. Accordingly, the details represented herein cannot be regarded as final and binding.



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