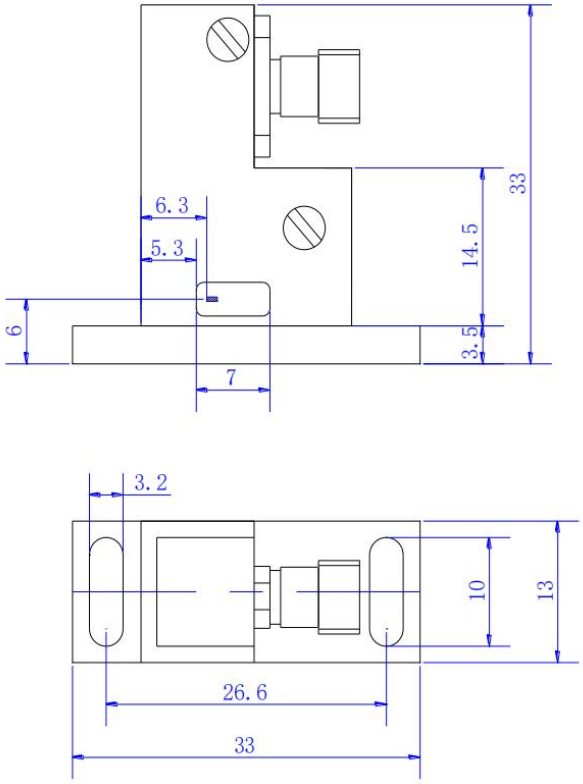
780 nm space AOM series

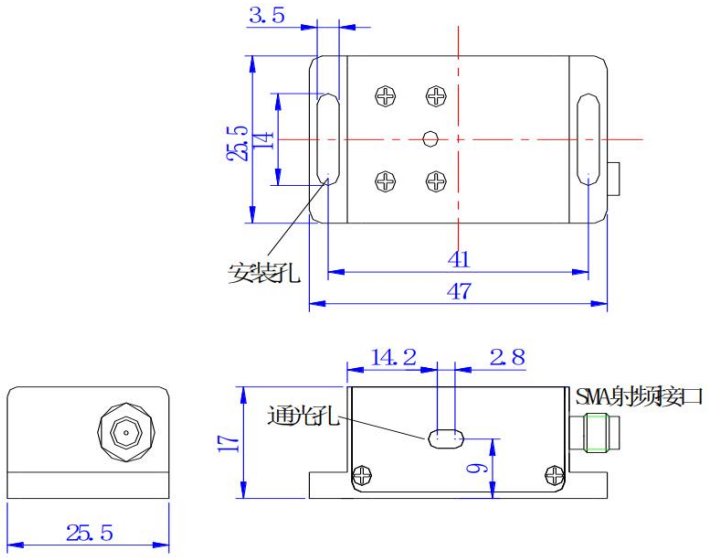
Product Overview:	Acousto optic modulator is a kind of photoelectric product that uses the principle of acousto-optic interaction to modulate the laser intensity and shift the frequency. Its rate control and modulated light intensity far exceed the mechanical shutter. The wavelength range is from the ultraviolet region to the mid infrared region. The use of the recommended supporting driver can achieve the best performance and achieve more application options
Performance characteristics:	●Fast modulation speed ●High diffraction efficiency ●High temperature stability and reliability ●Small size
Application area:	●Lidar ●Material processing ●Laser Doppler system ●Image processing ●Cold atomic physics
Ordering Information:	(This indicator is a typical optical wavelength indicator, and other wavelengths and frequencies can be selected)

Parameter	Unit	SGT80-780-2TA	SGT110-780-1TA	SGT200-780-0.5TA	SGT300-780-0.3TA	SGT800-780-0.1PB	SGT1200-780-0.1PB	SGT1500-780-0.1PB

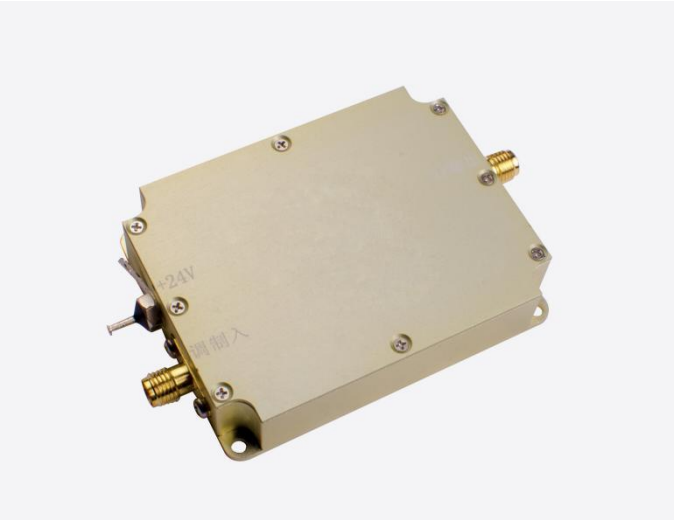
Wavelength	nm	700-900				700-800		
Polarization state of input light	-	arbitrarily				//		
Center frequency	MHz	80	110	200	300	800	1200	1500
Diffraction efficiency	%	≥85	≥85	≥75	≥70	≥50	≥40	≥30
Frequency shift bandwidth	MHz	20	30	40	50			
Optical aperture	mm	2	1	0.5	0.3	0.1		
Diffraction light separation angle	mrad	14.9	20.4	37.1	55.7	99	148	186
Drive power	W	≤2				≤2		
Rise time of light pulse	ns/mm	160				110		
Damage threshold	W/mm2	10				10		
Static transmissivity	%	95				≥70		
Package	-	TA				PB		
Extinction ratio	-	＞1000:1						
RF connector	-	SMA 母头						
Input impedance	Ω	50						
VSWR	-	＜1.3：1						
Cooling mode	-	Conduction cooling						



Package PB



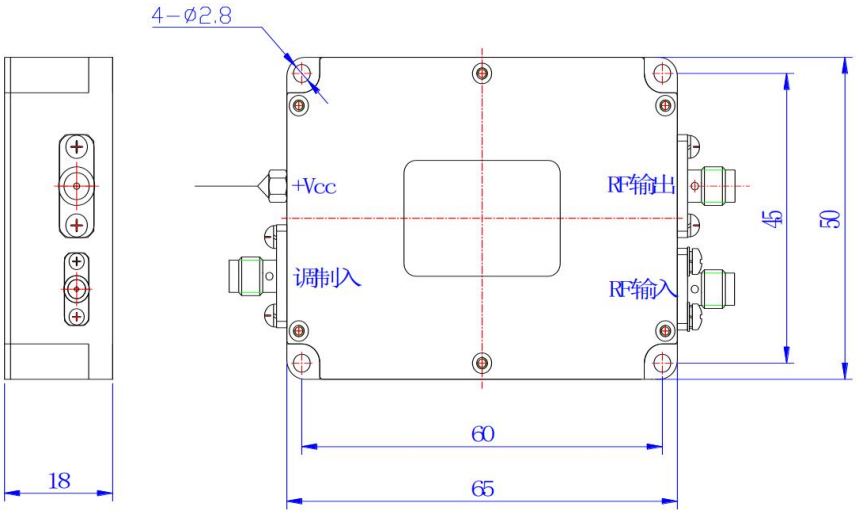
Package TA



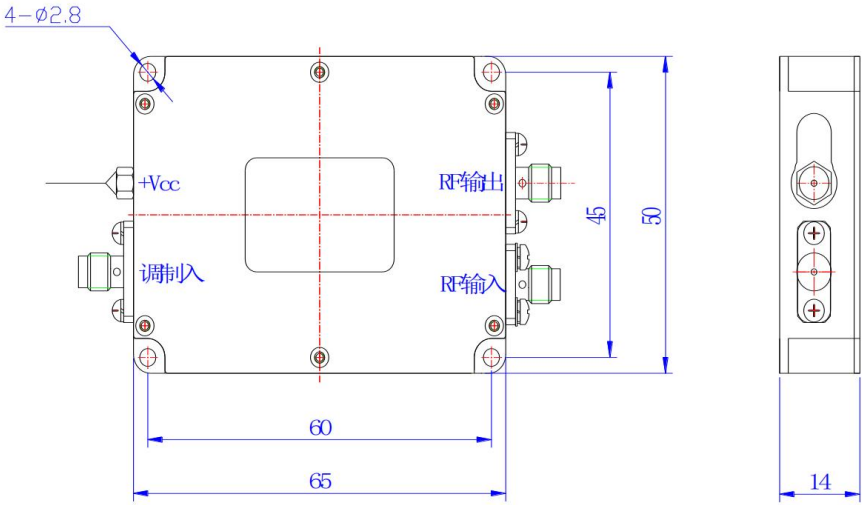
Low-power N-type acoustooptic driver

Product Overview:	Product overview: acoustooptic driver is a RF driver that provides supporting functions for acoustooptic device products. It is applicable to acoustooptic modulator and frequency shifter products with driving power less than 3W. The RF signal generated by the driver is used to generate ultrasonic waves in the crystal of the acoustooptic device. The frequency and intensity of the RF signal applied will determine the degree to which the beam is modulated, deflected or tuned. The drive has good heat dissipation, and the use of matched drive will bring better temperature stability.				
Performance characteristics:	●Small size ●Fast response time ●Low power consumption ●High temperature stability and reliability				
Modulated signal input	-	Model (SGXXXX-33-N-ab) "X" - use "Y" for frequency shift function, and "T" for modulation function; "XXX" - operating frequency "33" refers to RF output power; "N" indicates the package type; "A" - use "1" for power supply voltage 24V, "2" for power supply voltage 12V; "b" - use "D" for digital TTL modulation, and "A" for analog modulation.			
		SGT80-33-N-1D SGT80-33-N-1A1 SGT80-33-N-1A5	SGT110-33-N-1D SGT110-33-N-1A1 SGT110-33-N-1A5	SGT200-33-N-1D SGT200-33-N-1A1 SGT200-33-N-1A5	SGT300-33-N-1D SGT200-33-N-1A1 SGT200-33-N-1A5
Specifications of modulation input interface					
Modulated signal input	-	Digital modulation (high level 3.3-5V; low level 0-0.2V@1k Ω) Analog modulation (A1: 0-1V@50 Ω） Analog modulation (A5: 0-5V@1k Ω）			
Interface	-	SMA			
RF output interface specification					
Output signal frequency	MHz	80	110	200	300

Frequency stability	ppm	100 (1 Special)			
Rise and fall time	ns	<25	<20	<10	<7
Output signal power	W	＜2			
Switching ratio	dB	⩾60			
Harmonic suppression ratio	dBc	>25			
Signal output standing wave ratio	–	⩽1. 3			
Interface	–	SMA			
Complete machine specification					
Maximum power consumption	W	10			
Working voltage	Vdc	24±1V（Optional 12±0.5）			
Power interface		Through core capacitance (core wire is connected to positive, solder lug is connected to negative)			
Package	-	N/N2			



Package N



Package N2