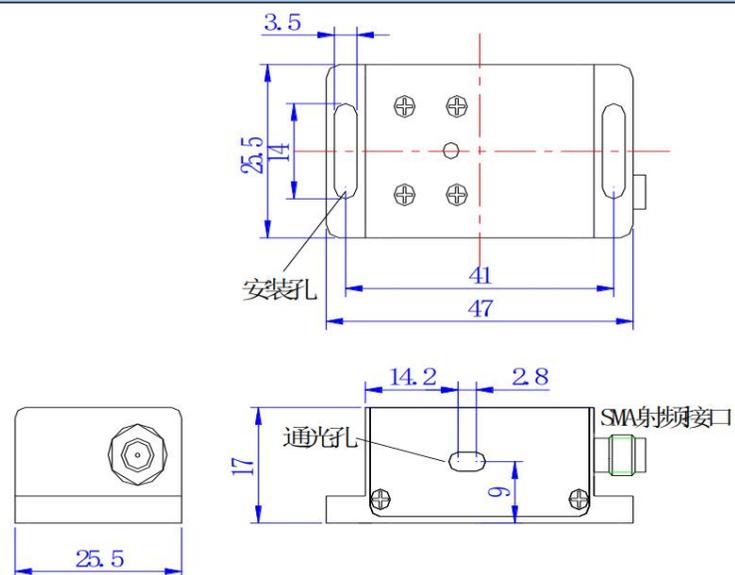




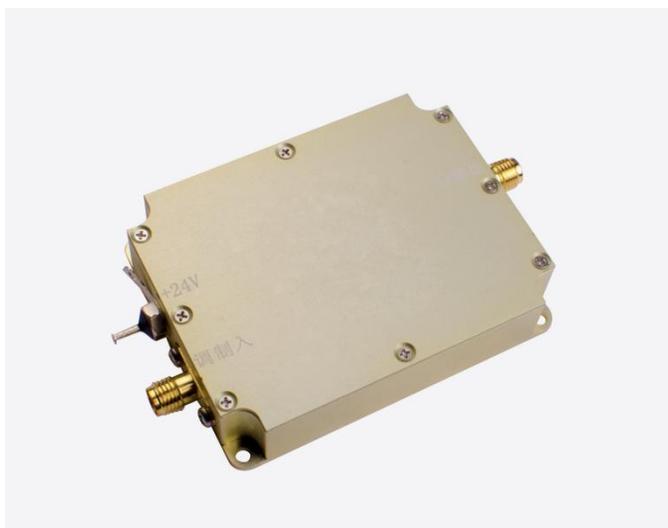
### 1550 nm space AOM series

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	SGT100-1550-1TA	SGT200-1550-0.2TA
Wavelength	nm	1550 (Typical value)	
Polarization state of input light	-	arbitrarily	
Center frequency	MHz	100	200
Diffraction efficiency	%	≥85	≥80
Frequency shift bandwidth	MHz	30	50

Optical aperture	mm	1	0.2
Diffraction light separation angle	mrad	36.9	73.8
Drive power	W	$\leq 2$	
Rise time of light pulse	ns/mm	160	
Damage threshold	W/mm <sup>2</sup>	10	
Static transmissivity	%	95	
Extinction ratio	-	> 1000:1	
RF connector	-	SMA	
Input impedance	$\Omega$	50	
VSWR	-	< 1.3 : 1	
Cooling mode	-	Conduction cooling	
Material Science	-	Tellurium oxide	
Package	-	TA	



Package TA



## Low-power N-type acousto-optic driver

<p><b>Product Overview:</b></p>	<p>Product overview: acousto-optic driver is a RF driver that provides supporting functions for acousto-optic device products. It is applicable to acousto-optic 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 acousto-optic 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.</p>							
<p><b>Performance characteristics:</b></p>	<ul style="list-style-type: none"> <li>● Small size</li> <li>● Fast response time</li> <li>● Low power consumption</li> <li>● High temperature stability and reliability</li> </ul>							
<p>Supporting drive</p>	-	<p>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.</p> <table border="1" data-bbox="719 1189 1877 1315" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">SGT100-33-N-1D</td> <td style="text-align: center;">SGT200-33-N-1D</td> </tr> <tr> <td style="text-align: center;">SGT100-33-N-1A1</td> <td style="text-align: center;">SGT200-33-N-1A1</td> </tr> <tr> <td style="text-align: center;">SGT100-33-N-1A5</td> <td style="text-align: center;">SGT200-33-N-1A5</td> </tr> </table>	SGT100-33-N-1D	SGT200-33-N-1D	SGT100-33-N-1A1	SGT200-33-N-1A1	SGT100-33-N-1A5	SGT200-33-N-1A5
SGT100-33-N-1D	SGT200-33-N-1D							
SGT100-33-N-1A1	SGT200-33-N-1A1							
SGT100-33-N-1A5	SGT200-33-N-1A5							
<p>Specifications of modulation input interface</p>								
<p>Modulated signal input</p>	-	<p>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)</p>						
<p>Interface</p>	-	<p>SMA</p>						

RF output interface specification			
Output signal frequency	MHz	100	200
Frequency stability	ppm	100 ( 1 Special)	
Rise and fall time	ns	<25	<10
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	

