

# MODEL A10160

45MHz 34Vp-p Single Channel  
Signal Amplifier



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- 45MHz bandwidth
- High amplitude to 34Vp-p into 50Ω
- High output current drive to 1A
- Fast transition time of <10ns
- Small footprint, all metal case
- Custom gain configuration
- Low distortion

Model A10160 is an ultra-small footprint, wideband, DC coupled amplifier designed for high frequency, high current, signal amplification. With a high bandwidth of 45MHz, 34Vp-p into 50 ohms and up to 10W output power, the A10160 is the ideal complimentary amplifier to any signal source that needs a supporting power boost for demanding applications.

### Enhancing Performance

The A10160 was designed as a “Snap-On” accessory for the Tabor WaveXciter series and models WS8351/2, both having a maximum amplitude of 4Vp-p, which can be limiting for some applications, requiring higher voltage and current to drive their UUT. Combined with the A10160 the WX and WS models will now offer even higher abilities to solve demanding application requiring up to 45MHz signals at 34Vp-p into 50 ohms loads, without compromising their signal integrity.

### High Current High Power

With a peak output current of 1A and 750mA continuous the A10160 enables a continuous power output of 7.5W, and a peak output power of up to 10W, making it ideal for various pulse applications.

### Cost Effective Versatile Solution

While the A10160 was designed with the Tabor units in mind, it can be used as a standalone amplifier for any signal source. The A10160 offers a compatible, compact and cost effective solution for extending any signal source's power performance.



### Optional Configurations

The A10160's standard configuration enables a maximum output voltage of 34Vp-p into 50 ohms with a gain of x10. Other custom gain, such as x15 or 20 can be ordered at the time of the purchase, enabling clients' even wider variety of choices to solve their application.

### Target Applications

While target applications include piezo-electronics, transducer characterization, MEMS, general electronics and scientific applications, the new A10160 is an ideal solution for virtually any wide bandwidth application that requires high voltage and high current amplification.

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### Specification

#### INPUT CHARACTERISTICS

<b>Channels:</b>	1
<b>Type:</b>	Single Ended
<b>Connector:</b>	Front panel SMA
<b>Impedance:</b>	50Ω
<b>Coupling:</b>	DC
<b>Damage Level:</b>	6Vp-p (-3V to +3V peaks)
<b>Frequency Range:</b>	DC to 45MHz

#### OUTPUT CHARACTERISTICS

<b>No. of Channels:</b>	1
<b>Type:</b>	Single Ended
<b>Coupling:</b>	DC coupled
<b>Connector:</b>	Rear panel BNC
<b>Gain:</b>	x10, fixed (x15 gain optional)
<b>Polarity:</b>	Normal
<b>Amplitude:</b>	
Peak	34Vp-p into 50Ω
Continuous	30Vp-p into 50Ω
<b>Max. Output Current:</b>	
Peak	1A
Continuous	750mA
<b>Impedance:</b>	2.5Ω ±5%
<b>Protection:</b>	Short Circuit to Case Ground & thermal protection

#### SQUARE WAVE CHARACTERISTICS

<b>Transition Time:</b>	<10ns (typ.)
<b>Aberration:</b>	
10Vpp	<5%
34Vpp	<10%

#### SINE WAVE CHARACTERISTICS

<b>Bandwidth (-3dB):</b>		
<10Vpp	45MHz (typ.)	
<34Vpp	30MHz (typ.)	
<b>Harmonics &amp; Non-Harmonic Distortion (typ.)</b>		
	10Vpp	25Vpp
1MHz	<-58dBc	<-54dBc
10MHz	<-45dBc	<-45dBc
30MHz	<-42dBc	<-30dBc

#### GENERAL

<b>Voltage:</b>	±20VDC
<b>Power Consumption:</b>	20W
<b>Signal Ground:</b>	Grounded
<b>Dimensions:</b>	45 x 30 x 85 mm (W x H x D)
<b>Weight:</b>	
Without Package	115 g (Standalone)
Shipping Weight	
1 x A10160 Kit	1.25 Kg
2 x A10160 Kit	1.45 Kg
<b>Temperature:</b>	
Operating	0°C to 40°C
Storage	-40°C to 70°C
<b>Humidity:</b>	80% RH, non-condensing
<b>Safety:</b>	CE Marked, IEC61010-1
<b>Calibration:</b>	1 years
<b>Warranty:</b>	3 year

#### ORDERING INFORMATION

MODEL	DESCRIPTION
<b>A10160-10</b> <sup>(1)</sup>	45MHz 34Vp-p, Single Channel Signal Amplifier
<b>Gain:</b>	<b>10</b> = x10 gain, fixed 15 = x15 gain, fixed 20 = x20 gain, fixed

<sup>(1)</sup> Standard Configuration

<sup>(2)</sup> Specification is given for the standard configuration only