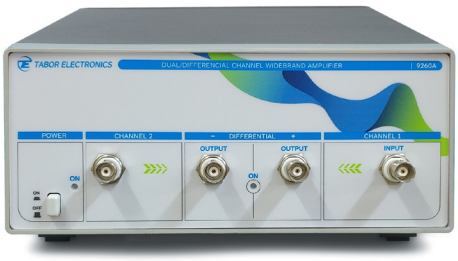
9160A/9260A-DST

34Vp-p Single / Dual Channel Signal Amplifier



The 9x60A-DST is a bench-top, 2U, half 19" rack size, fully metal case, single or dual channel DC coupled wideband amplifier designed for high frequency, high current, signal amplification. While target applications include piezo-electronics, transducer characterization, MEMS, general electronics and scientific applications, with a high bandwidth of 45MHz, 34Vp-p into 50 ohms and up to 10W output power and a peak output current of 1A, the 9x60A-DST is the ideal complimentary amplifier to any signal source that needs a supporting power boost for demanding applications.

45MHz bandwidth

High output current to drive up to 1A

High amplitude to 34Vp-p into 50Ω

Fast transition time of <10ns

Compatible with any of the Tabor waveform generators

Low signal distortion

Instrument Configuration

The 9x60A-DST can be configured to be used as two, single-ended independent channels, or as a one input with two differential outputs. The 9x60A'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 can be ordered at the time of the purchase, enabling clients' even wider variety of choices to solve their application.

Output Characteristics

The outputs are located on the front panel. There are two outputs, one for each channel. When the 9x60A-DST is configured as two separate amplifiers, the outputs generate amplified signals within the range of 34Vp-p into matching load impedance at approximately 45MHz bandwidth.

Input Characteristics

There are three inputs for each channel:

1. Main input, which is located on the front panel and is normally used for signal inputs.
2. Auxiliary input, which is located on the rear panel and can be used as a summing input.
3. DC Offset input, which is located on the rear panel and can be used for offsetting signal level within the specified output level window.

Auxiliaries

The 9x60A-DST has two additional inputs for each channel allowing summation of two signals and providing an external control of DC level offset. These inputs are accessible from the rear panel only.

9160A/9260A-DST

34Vp-p Single / Dual Channel Signal Amplifier

Specifications

CONFIGURATION

9160A-DST	1 single-ended output
9260A-DST	2 single-ended outputs; 1 differential output

INPUT CHARACTERISTICS

MAIN INPUT	
Connector:	Front panel BNCs
Impedance:	50Ω
Coupling:	DC
Damage Level:	12Vp-p (-6V to +6V peaks)
Differential Accuracy:	4%
INPUT AUXILIARY	
Connector:	Rear panel BNCs
Impedance:	50Ω
Coupling:	DC
Damage Level:	12Vp-p (-6V to +6V peaks)
INPUT AUXILIARY	
Connector:	Rear panel BNCs
Impedance:	10kΩ
Coupling:	DC
Damage Level:	±2V
Accuracy:	7%

OUTPUT CHARACTERISTICS

Connectors:	Front panel BNCs	
Source Impedance:	0Ω	
Coupling:	DC	
Protection:	Short-circuit & Thermal	
Gain:	x10, fixed	
Polarity:	Normal	
Amplitude:	34Vp-p into matching impedance	
SQUARE WAVE CHARACTERISTICS		
Transition Time:	<10ns	
Aberrations:	<10%	
SINE WAVE CHARACTERISTICS		
Bandwidth:	-3dB	
Frequency Range:	DC to 45MHz	
Harmonics Distortion:	10Vp-p	25Vp-p (typ)
1MHz:	<-65dBc	<-54dBc
10MHz:	<-50dBc	<-45dBc
30MHz:	<-38dBc	<-30dBc

GENERAL

Voltage:	85VAC to 265VAC
Power Consumption:	50W max.
Dimensions (WxHxD):	
With Feet	315 x 102 x 395 mm
Without Feet	315 x 88 x 395 mm
Weight:	
Without Package	3.5 Kg
Shipping Weight	5 Kg
Temperature:	
Operating	0°C to +40°C
Storage	-40°C to +70°C
Warm up time:	30 minutes
Humidity:	85% , non-condensing
Safety:	CE Marked, IEC61010-1:2010
EMC:	IEC 61326-1:2013
Calibration:	1 years
Warranty:	1 year

ORDERING INFORMATION

MODEL	DESCRIPTION
9160A-DST	34Vp-p Single Channel Signal Amplifier
9260A-DST	34Vp-p Dual Channel Signal Amplifier