## **MODELS 9100/9200**

300Vp-p Single / Dual Channel Signal Amplifiers





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- High voltage output to 300Vp-p (±150V)
- Output current to 150mA (9200: 100mA per channel)
- Full power bandwidth from DC to >500kHz
- Slew rate to 200V/µs
- Low distortion
- Low cost
- Custom Configuration of: Gain Signal Ground

Model 9100/9200 is a Single/Dual Channel, 2U, half-rack size, bench-top power amplifier designed for signal amplification. With unprecedented signal purity, Model 9100/9200 amplifies signals from DC to over 500kHz. The unit has a fixed gain of x15 however the same amplifier is available with custom gain and no signal purity or performance degradation whatsoever.

#### Solves Common Problems

Model 9100/9200 operates as an amplifying buffer for signals emitted from waveform, function, or pulse generators. Most of these generators produce signals limited to 20Vp-p into high impedance. 9100/9200 can convert these voltages to levels as high as 300Vp-p. The amplifier has a current driving capability of ±150mA (9200: ±100mA per channel) from a 0.1W source. While the output can drive small capacitive or inductive loads, for full high speed potential it is recommended that the load characteristics should be mainly resistive. Model 9100/9200 can withstand load capacitance and inductance up to 100pF and 0.5mH without any performance deterioration

#### **Ground Level**

The advanced power amplifier is supplied with floating input and output connectors allowing flotation from ground level up to 250VDC. The only limitation is that both the input and output grounds must connect to the same level. This capability is extremely important in applications where the amplifying device must reside on the same ground level as its source. The floating capability can be added or removed using a simple, user-accessible, jumper connection.

#### **Target Applications**

The amplifier case was designed to stack on top or below other Tabor products. It can also be mounted alongside a Tabor generator in a standard 19" rack. The waveform-amplifier combo is an ideal solution for virtually any high-voltage, wide bandwidth application.

**Cost Effective Solution** 

Model 9100/9200 power amplifier is yet another of Tabor's cost-effective solutions for a full range of high voltage applications.



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### **Specification**

#### CONFIGURATION

Channels:

9100 1 single-ended output 9200 2 single-ended outputs

**INPUT CHARACTERISTICS** 

No. of channels: 1/2

**Damage Level:** 50Vp-p **Frequency Range:** DC to 500kHz

#### **OUTPUT CHARACTERISTICS**

#### **GENERAL**

**Gain:**  $x15^{(2)}$ , fixed **Polarity:** Normal

**Amplitude:** 0 to 300Vp-p (±150V)

Max. Output Current:

9100 150mA 9200 100mA

#### **SQUARE WAVE CHARACTERISTICS**

Transition Time: <1.5µs Aberrations: <15%

#### SINE WAVE CHARACTERISTICS

Bandwidth: -3dB

Small Signal 1MHz, at 20Vp-p Large Signal 500kHz, at 300Vp-p

**Accuracy:** ±(2% of full-scale amplitude range + 25mV), Square wave

at 1kHz

THD:

10Hz to 10kHz <0.1% 10kHz to 200kHz <1.2%,

#### **GENERAL**

Voltage Range: 100V/115V/230V Frequency Range: 47Hz to 63Hz

Power Consumption: 60W

**Signal Ground:** Floated to the same level as

the source, 250VDC max.

**Dimensions:** 

With Feet 315 x 102 x 395 mm (WxHxD) Without Feet 315 x 88 x 395 mm (WxHxD)

Weight:

Without Package 6kg Shipping Weight 7kg

Temperature:

Operating 0°C to 50°C Storage -40°C to 70°C

**Humidity:** 80% RH, non condensing **Safety:** CE Marked, IEC61010-1

Calibration: 1 years

Warranty (\*): 3 years standard

#### **ORDERING INFORMATION**

MODEL	DESCRIPTION
9100-15-G <sup>(1)</sup>	300Vp-p Single Channel Signal Amplifier
<b>9200-15-G</b> <sup>(1)</sup>	300Vp-p Dual Channel Signal Amplifier
Gain: Signal Ground:	10 through 20, fixed <sup>(2)</sup> <b>G</b> = Tied to Ground; F = Floated Ground

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





<sup>(2)</sup> Custom gain from x10 to x20 can be ordered however, bandwidth cannot be maintained. Consult the factory before ordering gain above 15.

<sup>(3)</sup> Specification is given for the standard configuration only