40 Years Celebration

# MODELS 9100/9200

## 300Vp-p Single / Dual Channel Signal Amplifiers

- 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/$\mu$s
- 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. Model 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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## 300Vp-p Single / Dual Channel Signal Amplifiers

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## Specification

### CONFIGURATION

**Channels:**

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

### INPUT CHARACTERISTICS

| | |
|---|---|
| **No. of channels:** | 1/2 |
| **Connector:** | Front panel BNCs |
| **Impedance:** | 1MΩ, DC coupled |
| **Damage Level:** | 50Vp-p |
| **Frequency Range:** | DC to 500kHz |

### OUTPUT CHARACTERISTICS

#### GENERAL

| | |
|---|---|
| **Connector:** | Front panel BNCs |
| **Impedance:** | 0.1Ω, DC coupled |
| **Protection:** | Short-circuit, 10 seconds |
| **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**[1] | 300Vp-p Single Channel Signal Amplifier |
| **9200-15-G**[1] | 300Vp-p Dual Channel Signal Amplifier |
| **Gain:** | **10** through **20**, fixed[2] |
| **Signal Ground:** | **G** = Tied to Ground; F = Floated Ground |

[1] Standard Configuration

[2] Custom gain from x10 to x20 can be ordered however, bandwidth cannot be maintained. Consult the factory before ordering gain above 15.

[3] Specification is given for the standard configuration only

(*) Standard warranty in India is 1 year.