The Trek Model 2100 HF is a high-frequency, high-speed, wide bandwidth amplifier for high power applications. It incorporates an all-solid-state design for highly reliable low-noise operation, thus achieving accurate output response and high slew rates, even in highly capacitive loads. Full power frequency response of the amplifier is essentially flat up to 2 MHz. No overshoot or instability of the waveform occurs due to the amplifier’s unique dual feedback feature.

**Key Specifications**

- Output Voltage Range: 0 to ±150 V DC or peak AC
- Output Current Range: 0 to ±300 mA DC
- Slew Rate: 2 kV/µs, typical
- Large Signal Bandwidth (-3 dB): DC to greater than 2.6 MHz
- Small Signal Bandwidth (-3 dB): DC to greater than 3 MHz
- DC Voltage Gain: 50 V/V

**Typical Applications Include**

- Dielectric material characterization
- Electro-optic modulation
- Ion beam control
- MEMS
- Piezoelectric driving and control
- Ultrasonics

**Features and Benefits**

- Incorporates all-solid state design for highly reliable low-noise operation
- Achieves accurate output rates and high slew rates even in highly capacitive loads
- Full power frequency response is essentially flat up to 2 MHz
- Dual feedback feature ensures “no overshoot” or instability of waveform
- RoHS compliant
- NIST-traceable Certificate of Compliance provided with each unit shipped
- CE compliant
## Model 2100HF Specifications

### Mechanical
- **Dimensions**: 141 mm H x 213 mm W 336 mm D (5.57" H x 8.38" W x 13.22" D)
- **Weight**: 6.8 kg (15 lb)
- **HV Connector**: BNC Connector

### Electrical
- **Input Power**: 90 to 127 V AC, at 48 to 63 Hz
  180 to 250 V AC, at 48 to 63 Hz

### Supplied Accessories
- **Operators’ Manual**: PN: 23435
- **Line Cord (104 to 127 V AC operation)**: PN: N5002
- **Fuse, 2 A, 250 V Slow, 5 mm x 20 mm**: PN: H0014R
- **Line Cord (207 to 250 V AC operation)**: Line cord type determined by the geographical destination of the unit
- **Fuse, 2 A, 250 V Slow, 5 mm x 20 mm**: PN: H0013R

### Optional Accessories
- **Optional Accessories**: None

### Performance
- **Output Voltage Range**: 0 to ±150 V DC or peak AC
- **Output Current Range**: 0 to ±300 mA DC
- **Input Voltage Range**: 0 to ±3 V DC or peak AC
- **Input Impedance**: 50Ω, nominal
- **DC Voltage Gain**: 50 V/V
- **Offset Voltage**: Less than ±100 mV
- **Output Noise**: Less than 50 mV p-p
- **Slew Rate (10-90%)**: Greater than 2000 V/µs
- **Large Signal Bandwidth (-3 dB)**: DC to greater than 2.6 MHz
- **Small Signal Bandwidth (-3dB)**: DC to greater than 3 MHz
- **Stability**
  - **Delay Time**: Less than 6 mV/minute, noncumulative
  - **Drift with Temp**: Less than 150 ns (input to output)

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Model 2100HF Specifications

<table>
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