TREK Introduces 80 Kilovolt High Voltage Power Amplifier

New Model 40/15 Takes ‘High Voltage’ to New Levels

8 May 2008 (Medina, NY) – TREK, INC., a designer and manufacturer of high-voltage power amplifiers and high-performance electrostatic instrumentation, recently introduced a High Voltage Power Amplifier (Trek Model 40/15) which, by providing up to 80 kV peak-to-peak (±40 kV), delivers the highest level of output voltages for any amplifier in its class, taking the term ‘high voltage’ to new heights – to voltage levels not previously feasible or available from high voltage linear amplifiers.

The Model 40/15 HV amplifier is the first of its kind to achieve such high voltage ranges along with high performance capabilities typically available only with lower voltage units. The 40/15 offers outstanding DC stability, high speed and precise control of output voltages in the range of 0 to ±40 kV DC or peak AC with an output current range of 0 to ±15 mA DC or peak AC.

This HV amplifier raises the bar on amplifier technology by providing a bipolar output amplifier in the ±40 kV range that offers exceptional stability and wideband performance, with high slew rates over a wide range of AC signals, together with low-noise operation.

Trek Model 40/15 was designed in response to the market need for ever-higher-voltage amplifiers as research and development technologies continue to make advancements in next generation applications. Research applications for the 40/15 include electrostatic deflection and dielectric studies. Other applications include but are not limited to research in the fields of plasma chemistry, electrostatic levitation, electrostatic coatings and partial discharge.

Since many of the research applications relate to materials and material evaluation, the industries and commercial applications that could benefit from the advancements enabled by Model 40/15 are diverse and include: aerospace, biotechnology, defense/military, power/energy, lab/instrumentation and semiconductors/electronics, to name a few.

Like all Trek amplifiers, this High Voltage Amplifier Model 40/15 offers: DC stability, wide bandwidth, well-regulated and controlled AC output signals, and full four-quadrant, class AB, all-solid-state output stages. The four-quadrant, active output stage sinks or sources current into reactive or resistive loads throughout the output voltage range. This is essential for achieving the accurate output response and high slew rates demanded by reactive loads.

Technical parameters for the Model 40/15 include: output voltage range of 0 to ±40 kV DC or peak AC; output current range of 0 to ±15 mA DC or peak AC; DC accuracy better than 0.1% of full scale; slew rate greater than 350 V/µs; DC offset adjustment from 0 to ±40 kV; adjustable current limit or current trip; precision voltage and current monitors. The unit is CE marked.

Trek offers other high-voltage power amplifiers specifically designed to drive reactive as well as resistive loads with high slew rates, wide bandwidth and excellent stability, for use in semiconductor, research, piezo and many other applications.

**TREK, INC.** (est. 1968) is a privately held company that designs, manufactures and markets high performance electrostatic measurement instruments, sensors & monitors, and high voltage amplifiers, power supplies & generators. Trek’s products are used by OEMs involved in semiconductor manufacturing and electrophotography; in applications sensitive to electrostatic discharge (ESD); and by companies and universities involved in a wide variety of research applications, including electrostatics, electrophotography, piezoelectrics, electrohydrodynamics and plasma chemistry. Customers include numerous Fortune 500 companies and leading universities. For more information call 585-798-3140, or go to [www.trekinc.com](http://www.trekinc.com).

**Caption:**

TREK Introduces 80 kV High Voltage Power Amplifier (Model 40/15)

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