

Barth Electronics, Inc.
1589 Foothill Dr.
Boulder City, Nevada, 89005

**Providing Quality Products to the
Pulse Power and ESD Communities
Since 1964**



Barth Test Systems Continue to Provide the Best Data and Best Value in Simulation and Testing

**Introducing our New Common Mode
Transient Generator for
CMTI (Common Mode Transient
Immunity Testing)**



What is CMTI?

- **CMTI stands for “Common Mode Transient Immunity”,**
 - a test performed on digital isolator devices
 - applied between the two isolated circuits
 - determines the maximum tolerable rate of rise or fall of a transient pulse without producing error in transmitted data



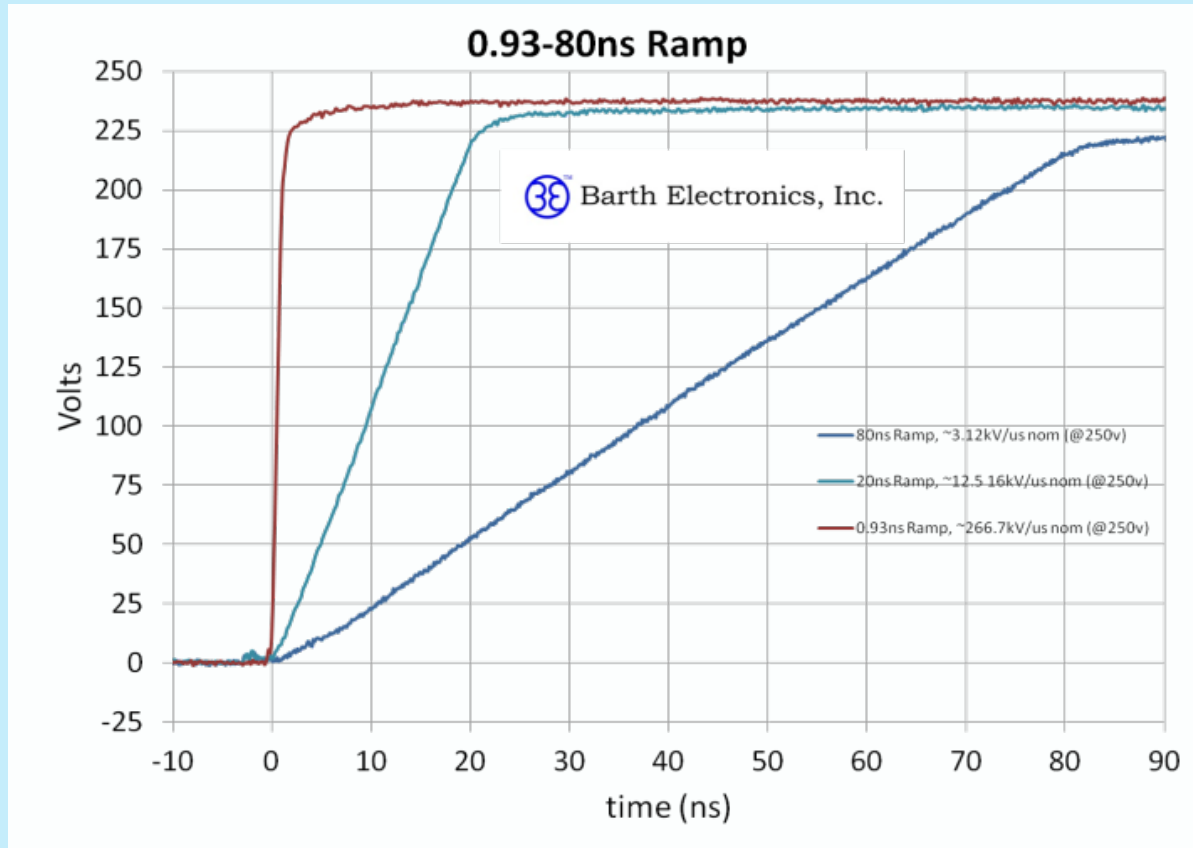
CMT Generator



Barth Common Mode Transient Generator was developed for Common Mode Transient (CMTI) characterization testing



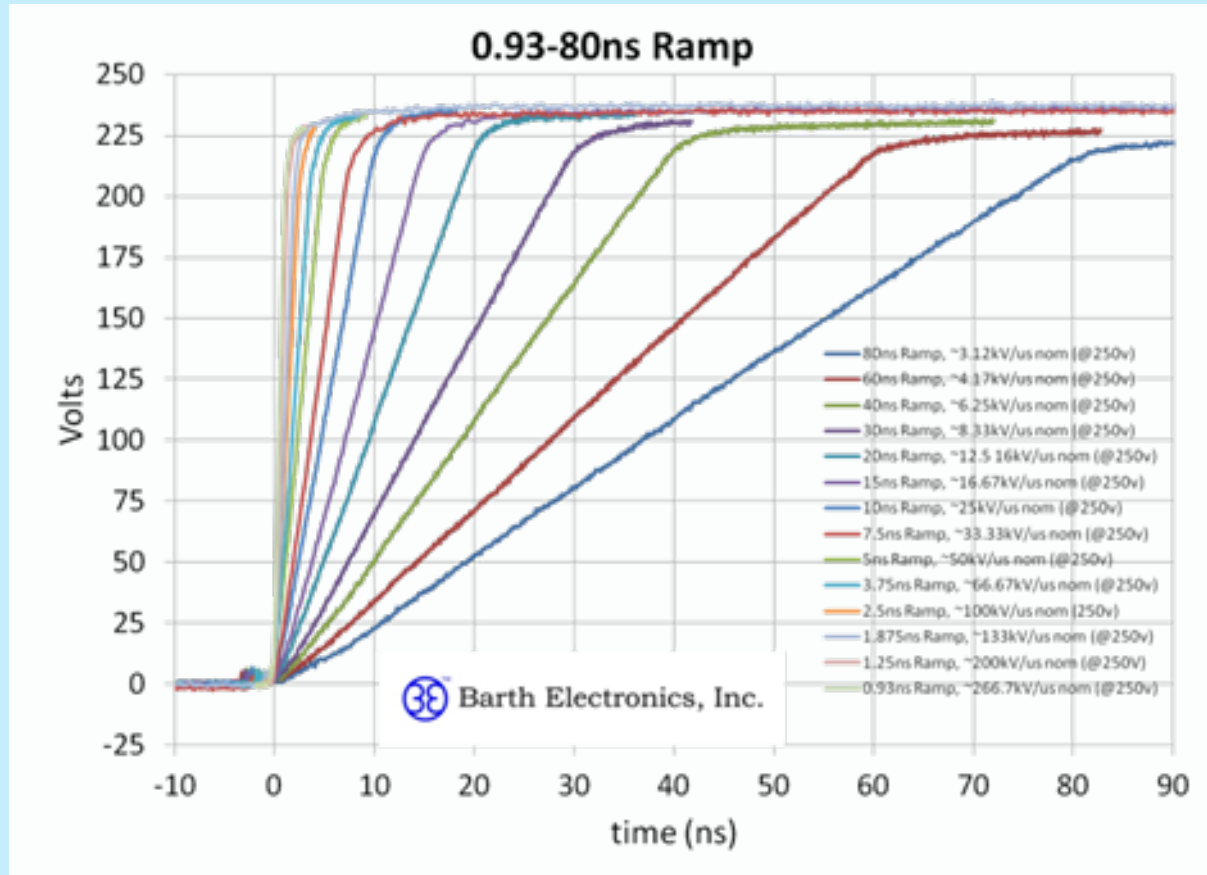
Ramp Output Examples



Samples of 0.93ns, 20ns, and 80ns ramp output showing leading edge of pulse into a matched 50 ohm load



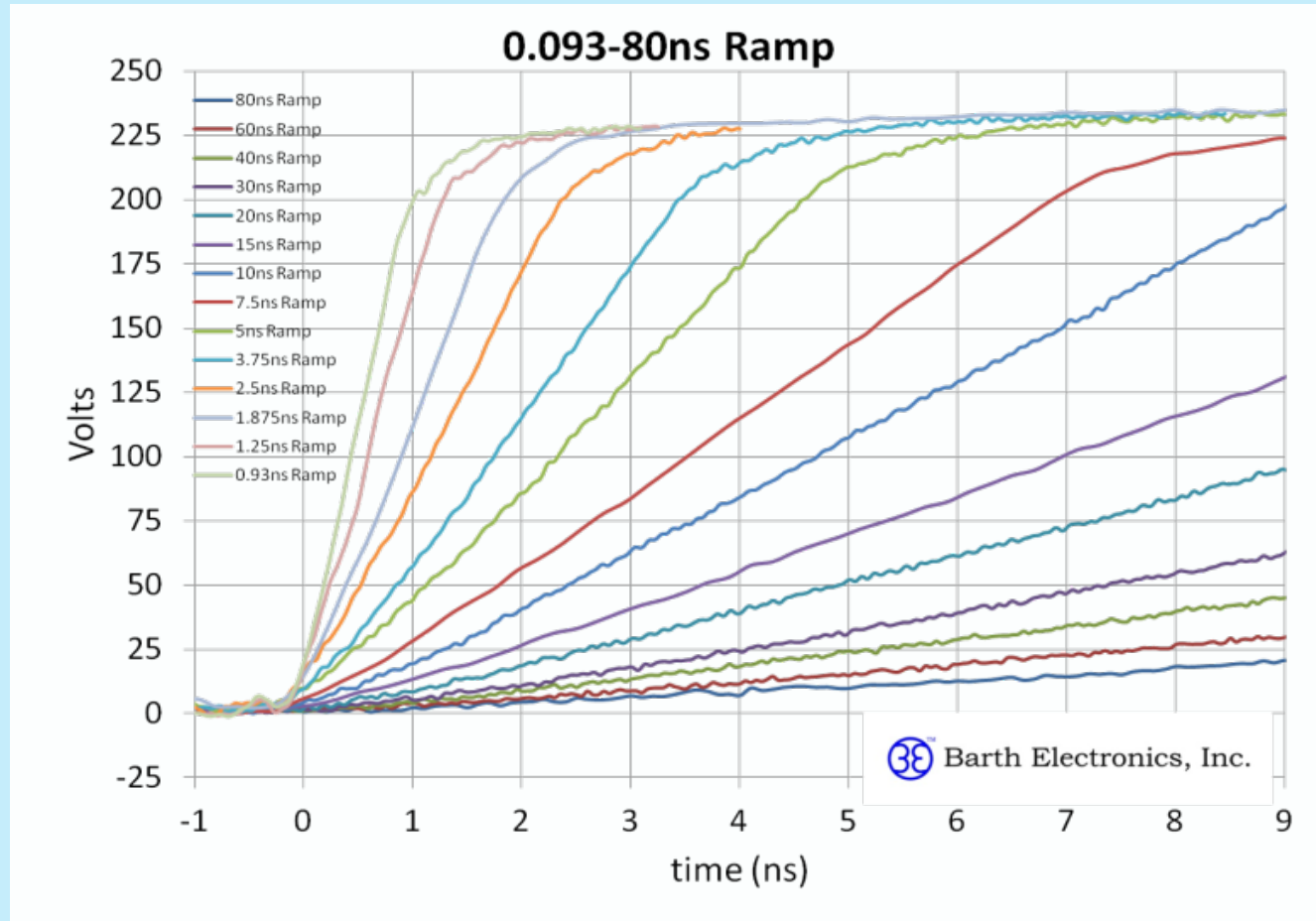
Discrete Ramp selections



Sample pulse outputs showing leading edge of pulse into matched 50 ohm load for all 14 ramp selections.



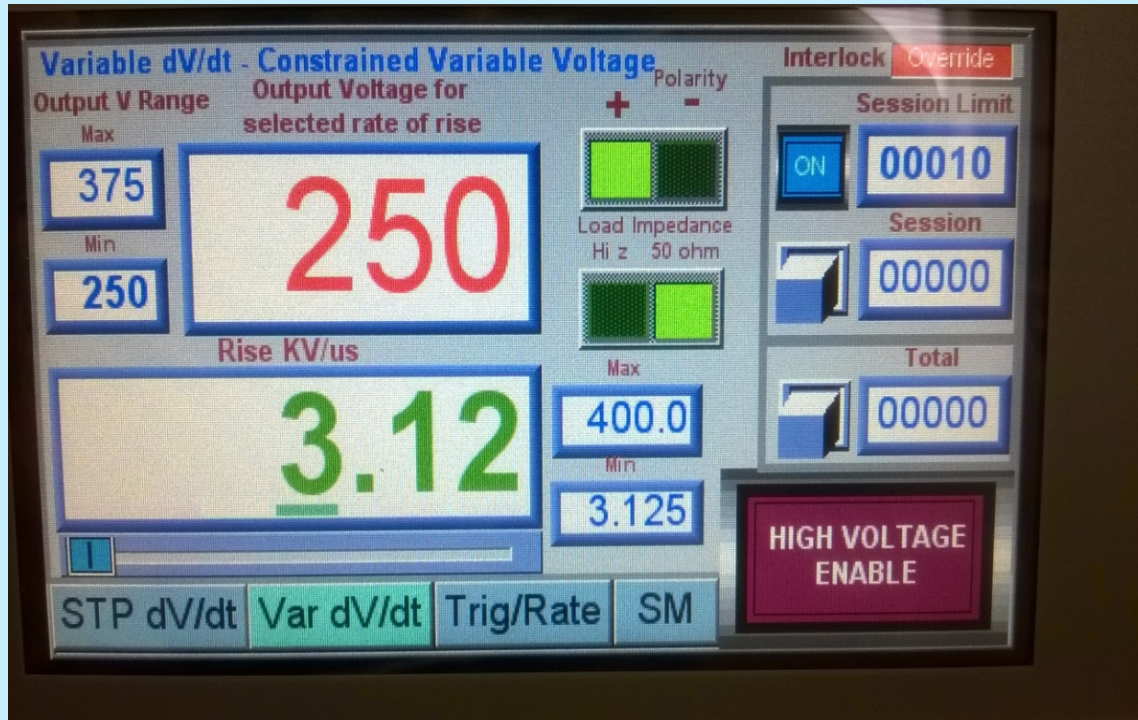
<1ns Ramp included:



Same Sample Pulse Outputs with expanded time scale.



User Interface



“VAR” variable dV/dt mode shown features a continuously variable dV/dt selectable by the user



Features:

- **Interactive control allows the user to gradually increase, or decrease the dV/dt rate applied to a DUT**
- **Stepped mode features user adjustable constant voltage and 14 stepped dV/dt selections**
- **Variable dV/dt mode features a more continuously variable dV/dt selectable by the user.**



Capabilities:

- **3.12 to 1600kV/ μ s can be delivered into 50 ohm loads**
- **6.25 to 3200kV/ μ s can be realized into high impedance loads.**
- **Internal rate and external triggering capability**



Includes:

- **Touch screen interface allows quick interactive and intuitive control.**
- **Optional Exponential Decay Pulse Shape module with 50 ohm termination**
- **Provision for external switch Interlock**
- **Two year warranty on the entire system**
- **Stand alone operation of the 731 pulse generator is supported**



Measurements that Drive Performance

➤ **Test equipment can represent significant investments, Consider the performance, durability, and reliability,**

.....You want equipment that is:

- High Performance
- Reliable - Offers a long service life
- Maintainable - Easy to repair



Measurements that Drive Performance

- **You need the accuracy and repeatability necessary to be able to identify even minor performance differences between test samples and designs.**



High-Precision Measurements Prevent Long-Term Losses

➤ **Barth Test Systems are built for accuracy and repeatability using:**

- Barth Custom High Voltage, Wide Bandwidth Attenuators, Voltage and Current Probes
- Higher Bandwidth Scopes
- Scope Calibration and Data Compensation



Reliability and total cost of ownership:

➤ **In time, most test systems will experience a problem.**

- No charge for phone or e-mail support troubleshooting, providing quick resolution of many issues over the phone.
- Loaner control boxes at no cost, while your control box is being repaired.
- No charge for failure diagnostic, and most control box repairs are completed and returned within a week.
- We work to limit customer down time, keep systems in operation, and repair costs reasonable.



Reliability and total cost of ownership: (cont.)

➤ Cost of Ownership:

- Reliability and serviceability are predominant factors
- Initial purchase cost can be the smallest cost factor over the lifetime of the test system.



Summary:

➤ **Barth Test Systems provide customers with:**

- Best performance.
- Reliable operation and long MTBF.
- Reasonable repair and upgrade costs.
- Quick turn around on repairs to minimize down time.
- Long term system support.
- Exceptional value.





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Barth Electronics, Inc.
2021 EOS/ESD Exhibitor Showcase

9/10/2021